Depression in palliative care:

Normal sadness or disorder?

Franca Warmenhoven

Colophon

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Cover illustration	Outer cover: Rob Vincken
	Inner cover: 'Leven' van Carolien Boss en Franca Warmenhoven
Layout	Jorgen Wullems
Print	True Colours
ISBN/EAN	978-94-91024-04-7
Financial support	This thesis was made possible by a grant of ZonMw (the Netherlands Organization for Health Research and Development, grant no. projectnummer 1150.0007: 'screening depressieve stoornis oncologische patiënten in palliatieve fase: een onderzoek in huisartspraktijk en ziekenhuis'

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Proefschrift

ter verkrijging van de graad van doctor

aan de Radboud Universiteit Nijmegen

op gezag van de rector magnificus prof. mr. S.C.J.J. Kortmann,

volgens besluit van het college van decanen

in het openbaar te verdedigen op maandag 27 mei 2013

om 10.30 uur precies

door

Fransisca Christiane Warmenhoven

geboren op 9 december 1977

te Ukkel, België

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"The most beautiful people we have known are those who have known defeat, known suffering, known struggle, known loss, and have found their way out of the depths. These persons have an appreciation, a sensitivity, and an understanding of life that fills them with compassion, gentleness, and a deep loving concern. Beautiful people do not just happen."

Elisabeth Kübler Ross (1926 - 2004)

To all the beautiful people in the world

Contents

Prologue

"The tragedy of life is not that it ends so soon, but that we wait so long to begin it."

W.M. Lewis (1878 – 1945)

This thesis explores depression in palliative care. However, my interest in this complex subject was not triggered by depression in palliative care patients, but by the opposite: the absence of mood symptoms in the face of dying. As many health caregivers do, I perceived mood symptoms as quite imaginable when people live in the face of death. I found the absence of mood symptoms more surprising than their presence. Working as a doctor in general practice, in a nursing home and in a hospice, I attended palliative care patients who showed symptoms, signs and behaviors congruent with depression. However, frequently, I also met patients who seemed at ease with their situation and did not show any sign of depression. These observations left me questioning the most.

I think of Mr. G., a cachectic 59-year-old man with prostatic cancer who fiercely denied the fact that he was dying and was still rapidly adapting to the disabilities caused by his illness. He seemed to be enjoying every day of his life.

Or Mr. H., a 48-year-old man with three children aged 18, 16 and 8, who had a history of depression. When I first met him, he suffered from incurable metastatic bowel cancer, but he seemed to be living his life in a balanced way, actively and purposefully, without any sign of depression.

Mrs. V., a woman in her seventies with uterus cancer, enjoyed the company of her family and church members who visited her frequently and made jokes about life and death.

These patients, however different in their acceptance and their coping with terminal illness, did not show signs of depression. They were expressing a continuous vitality that seemed adaptive to their situation, even in the perspective of dying. It left me wondering about what their 'secret' was and if I was missing something essential. I questioned what depression actually means in the context of palliative care. The results of my questioning are published in this thesis.

I hope that this thesis can help us as health caregivers to attune ourselves to the specific context of the palliative care patient and deliver integral, holistic palliative care. The exploration that has lead to this thesis has already contributed to a better personal integration of living and dying in my own life. In her book 'Intimate Death' Marie de Hennezel posed that the dying teach us how to live. I can confirm this statement from my own experiences in the many interviews with palliative care patients that I was allowed to do. I am most grateful that I have been given the opportunity to be taught in this way.

Chapter 1

Introduction

1.1 Palliative care

A minority of people die an acute cause of death, the main causes of death in the Netherlands being cancer, cardiovascular disease and respiratory disease[1]. This implies that for most people a short or longer period of disease precedes actual death. A terminal illness can be a highly stressful situation that does not only threaten a patient's life but also the quality of the remaining lifetime. This is the context in which palliative care is delivered. According to the World Health Organization (WHO), palliative care affirms life while regarding dying as a normal process. The WHO defines palliative care as '*an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual*'.[2] It is known that palliative care patients experience multiple problems. A study of Osse et al. reports that, on average, palliative care patients experience 37 different problems and require more professional attention than they were currently given for eight problems. The five most prevalent problems reported were: fatigue, heavy housework, coping with the unpredictability of the future, fear of metastasis and frustrations because of restrictions in their daily activities[3].

The context of palliative care is a very specific context: it comprises many physical, psychological, social and spiritual challenges that have a complex interrelatedness. Feelings of sadness and depression can be part of a patient's experience, and when this occurs, it will have an impact on the patient's wellbeing. However, sometimes to our surprise, it is not self-evident that palliative care patients experience depressive symptoms or depression. This thesis is directed at depressive symptoms and depression in the palliative care trajectory.

1.2 Depression in palliative care

1.2.1 What is depression?

"A grief without a pang, void, dark, and drear,

A stifled, drowsy, unimpassioned grief

Which finds no natural outlet, no relief

In word, or sigh, or tear"

Samuel Coleridge (1772-1834)[4]

Coleridge poetically describes the phenomenon of depression. In doing so, he provides us with a description of the inner feeling of the person suffering from depression and also refers to the unnaturalness in this feeling and the absence of finding relief in certain behavior (word, sigh, tear) that would normally be expected to give some relief.

In health care, in the clinical definition of depression, the unnaturalness and maladaptive qualities of depression are reflected in the term 'disorder'. The most widely used clinical definition of depression is the descriptive definition of the DSM-IV for major depressive disorder or major depression[5]. This description, that has also been incorporated in Dutch national guidelines for depression[6,7], states that a depressive disorder should be diagnosed if five of the following symptoms occur almost daily during at least two weeks: depressed mood, decrease of interest, weight loss, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate or indecisiveness or recurrent thoughts of death or

suicidal thoughts. At least one of the symptoms should be depressed mood or decrease of interest.

The term 'depression' is often used in clinical practice, sometimes referring to the DSM-IV definition of depressive disorder, but sometimes also referring to feelings of a patient, depressive symptoms or a depression score on a screening instrument. 'Depression' is an ambiguous term that in itself does not clarify from which perspective (e.g. feeling of the patient, clinical diagnosis by a psychiatrist) the concept is approached. Whenever the use of the term 'depression' is not specified, it makes it difficult to interpret findings. Sometimes, both in clinical practice and clinical research, other terms are used such as mood symptoms, sadness, despair, hopelessness and distress, all referring in slightly distinct ways to (aspects of) depression or symptoms related to depression.

Despite the apparent clarity that the DSM-IV definition of depressive disorder brings, the application of this definition in clinical practice can still be unclear. All DSM-IV definitions of disorders specify that a disorder must involve a dysfunction within the individual and must not be an expectable response to a stressor[5]. The person applying the DSM-IV definition thus has to (subjectively) appraise both the extent of dysfunction in the patient and what would be an expected response to the stressor. Consequently the application of the definition may depend partly on the assessor's attitude and beliefs about normality and/or on the individual context of the patient. Both the validity and the utility of the concept of depressive disorder are subject to dispute, because depressive disorder overlaps with many other physical and mental diagnoses and furthermore cannot be dissociated from social and cultural elements[8,9].

Table 1. Frequently used terminology for depression

Depression	Oxford Dictionary of English, 2009	Severe, typically prolonged feelings of despondency and dejection or a mental condition characterized by severe feelings of hopelessness and inadequacy typically accompanied by a lack of energy and interest in life.
(Clinical) Depression	Online: Dictionary.com	Depression: a condition of general emotional dejection and withdrawal; sadness greater and more prolonged than that warranted by any objective reason. Clinical Depression: a depression so severe as to be considered abnormal, either because of no obvious environmental causes, or because the reaction to unfortunate life circumstances is more intense or prolonged than would generally be expected.
Depression	Wikipedia	Depression: A state of low mood and aversion to activity. Certain mood disorders, such as major depressive disorder and dysthymia that feature depressed mood are commonly referred to as simply depression. Clinical depression or Major Depressive Disorder: A mental disorder characterized by episodes of all-encompassing low mood accompanied by low self-esteem and loss of interest or pleasure in normally enjoyable activities. This cluster of symptoms (syndrome) was named, described and classified as one of the mood disorders in the 1980 edition of the American Psychiatric Association's diagnostic manual. The term "depression" is ambiguous. It is often used to denote this syndrome but may refer to other mood disorders or to lower mood states lacking clinical significance.
Depression	World Health Organization	A mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.

Depressive disorder, DSM-IV-TR		Five or more of the following symptoms have been present during the same 2-week period and represent a change from previous functioning. - depressed mood most of the day* - markedly diminished interest or pleasure in all, or almost all, activities most of the day* - weight loss or gain or decrease or increase in appetite - insomnia or hypersomnia - psychomotor agitation or retardation - fatigue or loss of energy - feelings of worthlessness or excessive or inappropriate guilt - diminished ability to think or concentrate, or indecisiveness - recurrent thoughts of death, or suicidal ideation or planning or a suicide attempt One of the symptoms marked with * must be present.
Depressive symptoms		Main symptoms: low mood, lack of interest or pleasure Other symptoms: Change in weight or appetite, insomnia or hypersomnia, agitation or passivity, fatigue or loss of energy, feelings of worthlessness or inappropriate guilt, diminished ability to think or concentrate or indecisiveness, recurrent thoughts of death or dying or suicidal ideation or a suicide attempt. Endicott criteria: psychological depressive symptoms used to replace the somatic symptoms in cancer patients: • Tearfulness, depressed appearance • Social withdrawal, decreased talkativeness • Brooding, self-pity, pessimism • Lack of reactivity, blunting
Depressive complaints		Subjective description of patients burden related to depressive symptoms.

In this thesis we will use the term depression, referring to the definition given by the World Health Organization (WHO) which states that depression is a mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. We will use the term depressive disorder when the condition explicitly fulfills the descriptive criteria of the DSM-IV as applied by clinicians.

Worldwide, depression is the leading cause of disability as measured by YLDs (years lived with disability) and the fourth leading contributor to global burden of disease as measured by DALYs (disability adjusted life years)[10]. The World Health Organization (WHO) estimates that depression will be the second highest ranked cause of disease burden in developed countries by the year 2020[11]. In the Dutch general population the lifetime prevalence of depressive disorder is reported 18.7%[12].

Research shows that there is a large co-morbidity of depression with other mental health disorders, such as anxiety or substance abuse[13-15], and also with medical conditions, such as cardiovascular disease, diabetes mellitus, chronic obstructive pulmonary disease or cancer[16-18]. In the case of comorbidity, the relationship between depression and the comorbid disease can be bidirectional, which makes the assessment of depression more complex.

The reported prevalence of depression in palliative care patients varies substantially from 1% to 69%[19], presumably depending on using different definitions of depression and various ways of diagnosing, using different screening or assessment tools. A review on assessment methods for depression in palliative care patients showed that few studies classify depression by referring to a diagnostic system[20], which makes it difficult to report on the exact prevalence of depression in palliative care patients.

1.2.2 Normal sadness or depression?

In the context of palliative care it seems obvious that sadness is quite common and can, to a certain extent, be considered normal and even adaptive in the palliative care situation. It is also shown, however, that depression in a palliative care context can greatly affect the quality of life of both patients and caregivers[21,22]: depression imposes a burden and is associated with lower quality of life, increased disability, poorer prognosis, higher mortality, longer inpatient episodes and elevated health care costs. Furthermore, depression is associated with poor treatment adherence and increased difficulties of palliation of physical symptoms such as pain[23-27]. More generally, it can codetermine a suboptimal outcome in the last phase of life in hampering patients to successfully accomplish the tasks that may arise in this phase such as saying goodbye, reflecting on their life and dealing with unfinished business. However, labeling 'normal sadness' as depression has disadvantages for patient and society as well: medicalization of normal feelings and behavior, adverse side events and unnecessary interactions from medication, unnecessary and intensive treatments and higher health care costs. Therefore, while active case finding of depression in palliative care patients can be of great importance, it can only be successful when one is able to distinguish between 'normal sadness' and depression.

There are several difficulties in the process of diagnosing depression in palliative care patients. Firstly, some symptoms that can be present in a palliative care patient, such as weight loss or fatigue, can originate from both the physical disease or from depression[19]. While physical symptoms and depressive symptoms can share a common pathway of distress, physical symptoms may increase a depressed feeling whereas a depressed feeling can also result in more physical suffering. Secondly, it can be difficult to distinguish grief from depression in palliative care patients. Grief and depression can present similarly in palliative care patients[28]. Bereavement in a palliative care patient is an important functional process that can be facilitated with psychosocial support and counseling and may be hampered

by pharmacological treatment that is often given in the case of a depression[29]. Thirdly, attending to emotional issues may be difficult for both patients and physicians. In advanced cancer patients only in a minority of consultations with their doctor, emotional issues were explicitly discussed[30,31]. Finally, as stated before, the DSM-IV definition of depressive disorder specifies that to diagnose a depressive disorder, the 'dysfunction' that is observed must not be an expectable response to a stressor. This part of the assessment is especially challenging in a palliative care context. In facing death it seems particularly difficult to define what an expectable response to this stressor is. This may be dependent on many individual factors in both the palliative care patient and the professional caregiver who is making the assessment.

1.2.3 Screening instruments for depression in palliative care

Active screening for depression in palliative care patients is advocated[32]. Screening instruments could facilitate the assessment of depression in palliative care patients[33]. However, the unclear and ambiguous way of using the concept of depression in palliative care is reflected in the use of many different assessment and screening tools. A review showed that 106 different assessment methods are used for depression in palliative care and that there is no consensus on which screening instrument to use in the palliative care context[20]. In clinical palliative practice more than half of the palliative care physicians do not routinely use screening tools for depression[34]. Screening for depression in palliative care can be received with apprehension – in particular because of the problems to distinguish normal sadness from depressive disorder in the context of a palliative trajectory. Screening instruments for depression used in palliative care should be able to identify patients who would benefit from an intervention in this specific context.

1.3 Research objectives and outline of this thesis

The aim of this thesis was to study depression in palliative care from different perspectives. We aimed to answer the following questions:

1. What is the prevalence of depression in palliative care patients?
2. What is the validity of the Beck Depression Inventory (BDI-II) as a screening instrument for depressive disorder in palliative care patients?
3. How is depressive symptom burden, as measured by the Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC) and the Hospital Anxiety and Depression Scale (HADS), related to physical symptom burden in palliative care patients?
4. What resources and ways of coping do palliative care patients experience that help them prevent or manage mood symptoms in facing terminal illness?
5. How do family physicians diagnose and manage depression in palliative care?

In chapter 2 and 3 of this thesis we report on the prevalence of depression in palliative care patients. We studied the prevalence from the perspective of the general practitioner by reporting the prevalence of depressive disorder in the last phase of life using the Continuous Morbidity Registration (CMR) (Chapter 2). Secondly, we studied the prevalence by performing a psychiatric interview in a sample of palliative care patients (Chapter 3). Chapter 4 and 5 report the use of screening instruments for depression in palliative care patients. We studied the validity of the Beck Depression Inventory (BDI-II, appendix 1) in screening for depressive disorder in palliative care patients (Chapter 4) and the relation between scores on screening instruments for depression (BDI-II, Beck Depression Inventory Primary Care (BDI-PC) and Hospital Anxiety and Depression Scale (HADS, appendix 2)) and physical symptom burden (Chapter 5). In chapter 6 we

report the findings of an exploration of the perspective of the patient on what helps to prevent or address mood symptoms in a palliative care context. In chapter 7 results of a focus group study on the perspectives of family physicians on diagnosis and management of depression in palliative care patients are reported. Finally, in the general discussion and conclusions, we summarize our findings and place our findings in the context of current knowledge and development in health care and give suggestions for future research (Chapter 8). This thesis will end with an Epilogue in which I reflect on some personal observations that I have found valuable.

References

1. CBS. Centraal Bureau voor Statistiek: Doodsoorzaken, 2000-2011.
2. WHO. World Health Organization: Definition of palliative care.
3. Osse BH, Vernooij-Dassen MJ, Schade E, Grol RP. The problems experienced by patients with cancer and their needs for palliative care. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer* 2005;13(9):722-32.
4. Coleridge ST. Dejection: An Ode, 1802.
5. American_Psychiatric_Association. Diagnostic and statistical manual of mental disorders - text revised (DSM-IV-TR), 2000:p.369 - 82.
6. CBO. Richtlijn depressie (eerste revisie): Richtlijn voor de diagnostiek, behandeling en begeleiding van volwassen patiënten met een depressieve stoornis: Trimbos-instituut, Kwaliteitsinstituut voor de Gezondheidszorg CBO, Nederlands Huisartsen Genootschap (NHG), Landelijk Expertisecentrum Verpleging & Verzorging (LEVV), Nederlandse Vereniging voor Psychiatrie (NVvP), Nederlands Instituut van Psychologen (NIP), 2009.
7. NHG. Nederlands Huisartsen Genootschap: standaard Depressie (tweede herziening), 2012.
8. Dowrick C. Disputed diagnoses. *Beyond depression: A new approach to understanding and management*: Oxford University Press, 2009.

9. Horwitz AV WJ. *The loss of sadness; How psychiatry transformed normal sorrow into depressive disorder*: Oxford University Press, 2007.

10. Graaf d, R., Ten Have, M., Van Dorsselaer, S. NEMESIS-2: De psychische gezondheid van de Nederlandse bevolking. Opzet en eerste resultaten.: Trimbos Instituut, Utrecht, 2010.

11. WHO. World Health Organization: Depression.

12. NKV. Nationaal Kompas Volksgezondheid: Depressie: Rijksinstituut voor Volksgezondheid en Milieu, Ministerie van Volksgezondheid, Welzijn en Sport.

13. Cerda M, Sagdeo A, Galea S. Comorbid forms of psychopathology: key patterns and future research directions. *Epidemiologic reviews* 2008;30:155-77.

14. Roy-Byrne PP, Stang P, Wittchen HU, Ustun B, Walters EE, Kessler RC. Lifetime panic-depression comorbidity in the National Comorbidity Survey. Association with symptoms, impairment, course and help-seeking. *The British journal of psychiatry : the journal of mental science* 2000;176:229-35.

15. Schoevers RA, Van HL, Koppelmans V, Kool S, Dekker JJ. Managing the patient with co-morbid depression and an anxiety disorder. *Drugs* 2008;68(12):1621-34.

16. Cimpean D, Drake RE. Treating co-morbid chronic medical conditions and anxiety/depression. *Epidemiology and psychiatric sciences* 2011;20(2):141-50.

17. Mitchell AJ, Chan M, Bhatti H, Halton M, Grassi L, Johansen C, et al. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. *The lancet oncology* 2011;12(2):160-74.

18. Yohannes AM, Willgoss TG, Baldwin RC, Connolly MJ. Depression and anxiety in chronic heart failure and chronic obstructive pulmonary disease: prevalence, relevance, clinical implications and management principles. *International journal of geriatric psychiatry* 2010;25(12):1209-21.

19. Hotopf M, Chidgey J, Addington-Hall J, Ly KL. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. *Palliative medicine* 2002;16(2):81-97.

20. Wasteson E, Brenne E, Higginson IJ, Hotopf M, Lloyd-Williams M, Kaasa S, et al. Depression assessment and classification in palliative cancer patients: a systematic literature review. *Palliative medicine* 2009;23(8):739-53.

21. Mitchell AJ, Meader N, Davies E, Clover K, Carter GL, Loscalzo MJ, et al. Meta-analysis of screening and case finding tools for depression in cancer: Evidence based recommendations for clinical practice on behalf of the Depression in Cancer Care consensus group. *Journal of affective disorders* 2012;140(2):149-60.

22. Chochinov HM, Kristjanson LJ, Hack TF, Hassard T, McClement S, Harlos M. Burden to others and the terminally ill. *J Pain Symptom Manage* 2007;34(5):463-71.

23. Henoch I, Bergman B, Gustafsson M, Gaston-Johansson F, Danielson E. The impact of symptoms, coping capacity, and social support on quality of life experience over time in patients with lung cancer. *J Pain Symptom Manage* 2007;34(4):370-79.

24. Irving G, Lloyd-Williams M. Depression in advanced cancer. *European journal of oncology nursing : the official journal of European Oncology Nursing Society* 2010;14(5):395-9.

25. Lloyd-Williams M, Reeve J, Kissane D. Distress in palliative care patients: developing patient-centred approaches to clinical management. *European journal of cancer (Oxford, England : 1990)* 2008;44(8):1133-8.

26. Lloyd-Williams M, Shiels C, Taylor F, Dennis M. Depression--an independent predictor of early death in patients with advanced cancer. *Journal of affective disorders* 2009;113(1-2):127-32.

27. Rayner L, Price A, Evans A, Valsraj K, Hotopf M, Higginson IJ. Antidepressants for the treatment of depression in palliative care: systematic review and meta-analysis. *Palliative medicine* 2011;25(1):36-51.

28. Periyakoil VS, Hallenbeck J. Identifying and managing preparatory grief and depression at the end of life. *American family physician* 2002;65(5):883-90.

29. Reeve JL, Lloyd-Williams M, Dowrick C. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. *Palliative medicine* 2008;22(4):383-91.

30. Newell S, Sanson-Fisher RW, Girgis A, Bonaventura A. How well do medical oncologists' perceptions reflect their patients' reported physical and psychosocial problems? Data from a survey of five oncologists. *Cancer* 1998;83(8):1640-51.

31. Anderson WG, Alexander SC, Rodriguez KL, Jeffreys AS, Olsen MK, Pollak KI, et al. "What concerns me is..." Expression of emotion by advanced cancer patients during outpatient visits. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer* 2008;16(7):803-11.

32. Stiefel F, Die Trill M, Berney A, Olarte JM, Razavi A. Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer* 2001;9(7):477-88.

33. Kelly B, McClement S, Chochinov HM. Measurement of psychological distress in palliative care. *Palliative medicine* 2006;20(8):779-89.

34. Lawrie I, Lloyd-Williams M, Taylor F. How do palliative medicine physicians assess and manage depression. *Palliative medicine* 2004;18(3):234-8.

"We must always test the purity of a tradition

by reference to first principles,

but we shall equally judge of the vitality of a tradition

by its power to assimilate."

Dion Furtune

Chapter 2

Depressive disorder in the last phase of life in patients with cardiovascular disease, cancer and COPD; data from a 20-year follow-up period in general practice

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Abstract

Purpose: Depression is assumed to be common in chronic patients during their last phase of life and is associated with poorer outcomes. The prevalence of depression is widely varying in previous studies due to the use of different terminology, classification and assessment methods. This study explores the reported incidence of depressive disorder, as registered in the last phase of life of patients who died from cardiovascular disease, cancer or COPD, in a sample of primary care patients.

Methods: A historic cohort study, using a 20-year period registration database of medical records in four Dutch general practices (a dynamic population based on the Continuous Morbidity Registration database) was performed to explore the prevalence of depressive disorder in all patients who died from cardiovascular disease, cancer or COPD.

Results: In total 982 patients were included. Nineteen patients (1.9%) were diagnosed with a new depressive disorder in the last year of their life. The lifetime prevalence of depressive disorder in this sample was 8.2%.

Conclusions: The incidence of depressive disorder in the last phase of life is remarkably low in this study. These data were derived from actual patient care in general practice. Psychiatric diagnoses were made by general practitioners in the context of both patient needs and delivered care. We recommend a broader concept of depression in general practice to improve the diagnosis and treatment of mood disorders in patients in the last phase of life.

Introduction

Depression is common in patients during their last phase of life, and often encountered during a palliative trajectory[1]. Different terminology, classification and assessment methods for depression, depressive symptoms and depressive disorder in palliative care studies are used, resulting in a wide range of reported prevalence of depression between 3 and 77 % of patients[1-3]. In advanced cancer patients, the prevalence of a depressive disorder as assessed by a structured psychiatric interview is reported to be 8.7 – 11.8 %, depending on the time after diagnosis[4]. Patients with depression have a poor treatment adherence, increased difficulties in palliation of physical symptoms, increased disability, poorer prognosis, longer inpatient episodes and elevated health care costs[5-8]. Effective interventions for depression like psychotherapy or medication are available for patients in a palliative trajectory[5,9-12]. Given the negative impact of depression in the palliative trajectory, recognition, correct diagnosis and treatment of depressive disorder is of the utmost importance.

General practitioners (GPs) have an important role in supporting and treating patients in a palliative trajectory[13-15]. Hence, GPs also have a major role in recognizing depression in patients in the last phase of their life. In primary care, patients who are diagnosed with a depressive disorder by GPs seem to meet diagnostic criteria of depression using standardized psychiatric CIDI and SCAN interviews[16]. However, other studies show that depressive disorders might be under-recognized and under-treated by GPs[17-19]. It is unclear to what extent depressive disorders are under-diagnosed in patients during their last phase of life. The EAPC calls for proactive screening and treatment of depression in patients with terminal cancer with a limited survival time[1]. Therefore, it is important to know the prevalence of depressive disorder during regular (primary) care of patients in their end stage of life.

This study explores the reported incidence of depressive disorders, as registered in the last year of life of a population of patients who died from cardiovascular disease, cancer or COPD, in primary care practices of the

region of Nijmegen using a 20-year period registration database of medical records of general practitioners.

Methods

This study is a historic cohort study with a dynamic population based on the Continuous Morbidity Registration (CMR) database that has a 45-year observation period. According to the law and policy in the Netherlands, ethical approval is not required in case of research of anonymous morbidity or mortality registration. Patients whose information is registered in the CMR have signed an informed consent form to agree that this information can be used anonymously for research purposes.

The Continuous Morbidity Registration database

Details of the CMR database have been described elsewhere[20]. Briefly, since 1967 the CMR registers all new episodes of morbidity, presented to the GPs in four general practices in the surroundings of Nijmegen, the Netherlands. The practices have a stable practice population of approximately 12,000 – 13,500 individuals[21]. The practice population is representative of the Dutch population in terms of age, gender and morbidity patterns[22,23]. In the Netherlands, all inhabitants are listed within a general practice and receive their medical care through this particular general practice[24]. Consequently, these general practices have a very complete overview of their patients' medical history.

To classify morbidity the Dutch translation of the Royal College of General Practitioners' E-list was introduced in 1967– at that time this was the only general practice classification available. The E-list is based on the ICD-7 and has been updated in 1984 to make the list compatible with the ICHPPC-2[25]. The E-list classification has been maintained in the CMR-database ever since, to preserve consistency of data over time. Morbidity is prospectively registered by the GP at the time of diagnosis with a diagnosis-oriented

classification in the individual medical life history of the consulting patient. In addition, cause of death is recorded and entered in the system.
Medical diagnoses made after referral to other specialists are also included in the CMR database. When disease progression, outcome of additional testing or specialist review after referral changes the diagnostic perspective, the recorded diagnosis is revised and the correct diagnosis will thus have the time stamp of the first patient encounter for this disease. When corrections occur, only the corrected diagnosis is available in the database. Furthermore, in the database, for each patient, socio-demographic information (age, sex, and socio-economic status classified as low, middle, and high) and data on morbidity and mortality – if applicable - are available.

Registration of depressive disorder in the Continuous Morbidity Registration

The Dutch national guidelines for depression used in general practice are consistent with international guidelines and state that a depressive disorder should be diagnosed if five of the following symptoms occur almost daily during at least two weeks: depressed mood, decrease of interest, weight loss, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate or indecisiveness or recurrent thoughts of death or suicidal thoughts. At least one of the symptoms should be depressed mood or decrease of interest[26].
This definition that was first explicitly introduced in the guideline in 1994 reflects the diagnostic criteria that had been used in the CMR before.
In this study the medical history of deceased patients was analyzed for episodes of depressive disorder. It has been demonstrated that for the large majority of patients in the CMR database their diagnosis is in agreement with the above-mentioned diagnostic criteria for depression[16,27].

Selection of patients

In this study, we recruited all patients in the CMR database who died of cardiovascular disease, COPD or cancer and who matched the following inclusion criteria: (i) patients had died in the period from 1 January 1989 to 1

January 2009 of cardiovascular disease, COPD or cancer and (ii) patients had been listed with the practice for five or more years before their death.

Three groups of 'causes of death' were formed: cardiovascular disease, cancer and COPD. In the three groups, we included different diseases. In the group of patients who died from cardiovascular disease ('death by cardiovascular disease'), we included all patients who were registered with a cause of death of myocardial infarct, heart failure, atrial fibrillation, cerebrovascular accident, cardiac valve disease. Furthermore, patients who had a history of at least one of these diagnoses and had a registered cause of death of cardiac arrhythmia, tachycardia, peripheral arterial disease, pulmonary embolism, angina pectoris, other heart disease, other vascular disease, other diseases of the cardiovascular system, were also included in the group 'death by cardiovascular disease'. In the group of patients who died from cancer ('death by cancer'), we included all patients who were registered with a cause of death of any carcinoma, melanoma, leukemia, multiple myeloma or lymphomata or unknown metastasis. In the group of patients who died from COPD ('death by COPD'), all patients who had a registered cause of death of obstructive and/or chronic bronchitis or bronchiectasis were included. Furthermore patients who had a history of obstructive or chronic bronchitis or bronchiectasis and had a registered cause of death of pneumonia or other lower airway disease were also included in the group 'death by COPD'.

Statistical analysis

Descriptive statistics were used to summarize the characteristics of the patient sample. The medical history of the included patients was analyzed for the diagnosis of a new episode of depressive disorder and descriptive statistics were used. The date of a new episode of depressive disorder was related to the date of patient's first diagnosis of COPD, cardiovascular disease or cancer and to the date of their death.

Results

Population characteristics

From 1 January 1989 to 1 January 2009, 1666 deaths were recorded in the CMR database. 200 cases were excluded because patients were registered less than five years in the practice and thus did not meet inclusion criteria. Of the 1466 deaths 462 patients (31.5%) died of causes other than cardiovascular disease, cancer or COPD. Twenty-two patients were excluded because no diagnosis matching the cause of death was registered, so the order of occurrence of morbidity could not be determined. Of the remaining sample of 982 patients, 506 patients (51.5%) died of cardiovascular disease, 414 patients (42.2%) died of cancer and 62 patients (6.3%) died of COPD.

Incidence of depression in the last 6 and 12 months before death

Of the 982 included patients, nineteen patients (1.9%) were diagnosed with a new episode of depressive disorder in the last year before their death. Of these nineteen patients, eleven patients (1.1%) were diagnosed with a depressive disorder in the period of six months before their death.

The lifetime prevalence of depressive disorder in this sample was 8.2% (81 patients: 49% male, 51% female). The mean age at the time of death of patients with or without a lifetime depression was respectively 72.6 and 73.6 years. Of the patients who died from cardiovascular disease, cancer or COPD, lifetime prevalence of depressive disorder was respectively 6.9%, 9.9% and 8.1%.

Of the 81 patients who were diagnosed with an episode of depressive disorder, 55 patients were diagnosed with depression before they had been diagnosed with the disease (cardiovascular disease, cancer or COPD) that finally caused their death, and 26 patients were diagnosed with depressive disorder after they received a diagnosis of COPD, cardiovascular disease or cancer.

Discussion

This study offers information about the incidence of depressive disorder in the last phase of life derived from actual patient care in primary care and reports an incidence of depressive disorder of 1.9% in the last year of life of 982 patients who died of cardiovascular diseases, cancer or COPD. The incidence of depressive disorder in this study does not differ much from the 1-year-incidence in the general Dutch population of 1.7% that is reported in the Nemesis study[28].

Two reviews on depressive disorder in palliative care patients conclude that depressive disorder in palliative care patients is common and they express concerns about under diagnosis and under treatment[2,5]. However, the conclusion of the first review was that the quality of the evidence was poor and that the samples of patients were generally small.[5] Although the second review has been based on a literature search, no details were provided of the review methodology and the influence of study quality on the outcomes. So, although the findings of these reviews contrast with the findings of our study, we consider the low incidence of depressive disorder in the last year of life a valid result from reliable, real life data. The low incidence is in the range of the 1-year-incidence in the general population.

The diagnoses in this study were made in the context of actual patient needs and in the context of the delivered care. The long term registration database that was used, has maintained a consistent classification system in a stable population[21]. This population is representative for the general Dutch population[22,23]. A comparison of the study sample with the mortality data of the general Dutch population in 1990 showed that the study sample is representative concerning the proportion of causes of death (cardiovascular disease, COPD and cancer) as well as the proportion of male and female deaths within the different causes of death[29]. Furthermore, the classification system has been proved to adequately diagnose depressive disorder[16].

A possible explanation for the relatively low incidence of depressive disorder in this study may have been that the diagnoses in this study were made in the context of delivered care, guided by the patient's agenda and in the

context of patients needs in contrast to population research where depression is diagnosed with questionnaires or psychiatric interviews. Possibly GPs do not easily classify depressive symptoms in a palliative care context as depressive disorder as they consider these – in accordance with the patients – as normal reactions in the context of the end of life. Indeed, a recent focus group study showed that while GPs are sometimes reluctant to classify sadness as depression in a palliative care context, they frequently attend to normal sadness in palliative care patients[15]. GPs can attend to emotional issues in a palliative care context without dichotomizing the complex pattern of complaints into normal or disorder and with a explicit focus on the context of the depressive complaints that the patient experiences.

This study has several limitations. To improve the consistency of our study population and the consistency of the patient doctor relationship, we have excluded patients who were listed in the practice less than five years. This could have resulted in excluding patients with an unstable life, patients who left the practice out of dissatisfaction with their doctor or patients who were admitted in a nursing home in the last phase of their life. Patients with major life events among which moving house may be at a greater risk to develop a depressive disorder. However, in general the CMR registration has a stable practice population. Furthermore, if a problem arises in the patient-doctor relationship that results in the ending of this relationship, it is possible for patients to stay in the same practice with a different general practitioner and thus still be part of the CMR database. This makes it unlikely that the results have been severely influenced by this bias.

Furthermore, the inclusion of different diagnoses in the causes of death groups can be somewhat arbitrary, especially in the case of death by COPD or cardiovascular disease, because some of the diagnoses, such as pulmonary embolus, can have a relation with both COPD and cardiovascular disease. It is unlikely that this has influenced the results because of the very low prevalence of pulmonary embolus.

Regarding the diagnostic process, we do not know how individual patients in this sample were assessed for depressive disorder by their GP. Secondly, because different physicians were participating in the CMR there could have been inter-doctor variation in assessing depressive disorder. In general, we assume this to be small because criteria for diagnosis are discussed in monthly meetings, where the application of diagnostic criteria is monitored. However, GPs may have a different view or different ways of assessing depressive disorder in the last phase of life[15] that has not been monitored specifically. Furthermore, in interpreting the findings of this study, we must take into account that depressive disorder throughout the twenty years of data that were included in this study may not have been a stable concept. Changes in perspective on depressive disorder, for example the concern for medicalization and overtreatment[30], may influence the assessment of depressive disorder by physicians. In this study, it is unclear what perspective on depressive disorder the GPs used over the years.

This study was too small to compare differences in the incidence of depression in the different diagnosis groups. It is likely that people who suffer from COPD, cardiovascular disease and cancer experience different disease trajectories and it could be that also the incidences of depressive disorder are different for the different disease trajectories[20]. Moreover, different cancer types are known to specifically increase the risk for depressive disorder, possibly because the cause of specific biological characteristics of depressive disorder[31-33]. Furthermore, in our study we aimed to explore the incidence of depressive disorder in the last phase of life. However, the patients included in this study suffered from a mix of chronic and sub-acute causes of death. It is possible that there are differences in incidence of depressive disorder between these groups.

In this study we have not explored other psychiatric co-morbidity, such as anxiety disorders, that can be related to mood symptoms and may also have a high incidence in palliative care patients. In a previous study a prevalence of anxiety disorders of 7.6% is reported in advanced cancer patients[34].

In this study we have reported new episodes of depressive disorder in the last year of life. Patients who were already diagnosed with depressive disorder before their last year of life and continued to suffer from depression in their last year of life, were not included in the reported last-year-incidence.

Previous studies in palliative care patients with cancer report high numbers of depressed patients[1,2,5]. Based on the findings of this study, the assumption that the last phase of life is a risk for depression might be incorrect. The question remains whether depressive disorder is truly not as common in patients in the last phase of life than has been previously assumed, or whether this is caused by methodological issues such as method of registration and the context of the assessment.

Finally, if the incidence of depressive disorder is low, it does not mean that there is no patient need for care for mood symptoms in the last phase of life. Patients may benefit from a broader classification of emotional issues, in which support can be provided without dichotomizing complaints of sadness into normal or depressive disorder. We recommend that the context of the patient is explicitly included in this process of diagnosis and suggest that patient burden and patient need for support for emotional issues should be included in the assessment.
This seems congruent with the way GPs manage mood symptoms of their palliative care patients; they seem to manage these symptoms with a strong focus on the context of the patient without needing a diagnosis of a disorder[15]. Therefore, we recommend studying the last phase of life with a broader concept of depression to gain more insight in the actual situation in clinical practice.

References

1. Stiefel F, Die Trill M, Berney A, Olarte JM, Razavi A. Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer.* Oct 2001;9(7):477-488.

2. Hotopf M, Chidgey J, Addington-Hall J, Ly KL. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. *Palliative medicine.* Mar 2002;16(2):81-97.

3. Miovic M, Block S. Psychiatric disorders in advanced cancer. *Cancer.* Oct 15 2007;110(8):1665-1676.

4. Akechi T, Okuyama T, Sugawara Y, Nakano T, Shima Y, Uchitomi Y. Major depression, adjustment disorders, and post-traumatic stress disorder in terminally ill cancer patients: associated and predictive factors. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology.* May 15 2004;22(10):1957-1965.

5. Irving G, Lloyd-Williams M. Depression in advanced cancer. *European journal of oncology nursing : the official journal of European Oncology Nursing Society.* Dec 2010;14(5):395-399.

6. Lloyd-Williams M, Reeve J, Kissane D. Distress in palliative care patients: developing patient-centred approaches to clinical management. *European journal of cancer (Oxford, England : 1990).* May 2008;44(8):1133-1138.

7. Rayner L, Loge JH, Wasteson E, Higginson IJ. The detection of depression in palliative care. *Current opinion in supportive and palliative care.* Mar 2009;3(1):55-60.

8. Reeve JL, Lloyd-Williams M, Dowrick C. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. *Palliative medicine.* Jun 2008;22(4):383-391.

9. Akechi T, Okuyama T, Onishi J, Morita T, Furukawa TA. Psychotherapy for depression among incurable cancer patients. *Cochrane database of systematic reviews (Online).* 2008(2):CD005537.

10. Ly KL, Chidgey J, Addington-Hall J, Hotopf M. Depression in palliative care: a systematic review. Part 2. Treatment. *Palliative medicine.* Jul 2002;16(4):279-284.

11. Price A, Hotopf M. The treatment of depression in patients with advanced cancer undergoing palliative care. *Current opinion in supportive and palliative care.* Mar 2009;3(1):61-66.

12. Rayner L, Price A, Evans A, Valsraj K, Hotopf M, Higginson IJ. Antidepressants for the treatment of depression in palliative care: systematic review and meta-analysis. *Palliative medicine.* Jan 2011;25(1):36-51.

13. Aabom B, Kragstrup J, Vondeling H, Bakketeig LS, Stovring H. Does persistent involvement by the GP improve palliative care at home for end-stage cancer patients? *Palliative medicine.* Jul 2006;20(5):507-512.

14. Neergaard MA, Vedsted P, Olesen F, Sokolowski I, Jensen AB, Sondergaard J. Associations between successful palliative trajectories, place of death and GP involvement. *Scandinavian journal of primary health care.* Sep 2010;28(3):138-145.

15. Warmenhoven F, van Rijswijk E, van Hoogstraten E, et al. How family physicians address diagnosis and management of depression in palliative care patients. *Annals of family medicine.* Jul 2012;10(4):330-336.

16. van Weel-Baumgarten EM, van den Bosch WJ, van den Hoogen HJ, Zitman FG. The validity of the diagnosis of depression in general practice: is using criteria for diagnosis as a routine the answer? *The British journal of general practice : the journal of the Royal College of General Practitioners.* Apr 2000;50(453):284-287.

17. Klinkman MS, Coyne JC, Gallo S, Schwenk TL. False positives, false negatives, and the validity of the diagnosis of major depression in primary care. *Archives of family medicine.* Sep-Oct 1998;7(5):451-461.

18. Lecrubier Y. Widespread underrecognition and undertreatment of anxiety and mood disorders: results from 3 European studies. *The Journal of clinical psychiatry.* 2007;68 Suppl 2:36-41.

19. Tylee A, Walters P. Underrecognition of anxiety and mood disorders in primary care: why does the problem exist and what can be done? *The Journal of clinical psychiatry.* 2007;68 Suppl 2:27-30.

20. van den Bemt L, Schermer T, Bor H, et al. The risk for depression comorbidity in patients with COPD. *Chest.* Jan 2009;135(1):108-114.

21. van Weel C. Longitudinal research and data collection in primary care. *Annals of family medicine.* May-Jun 2005;3 Suppl 1:S46-51.

22. Schers H, Bor H, van den Hoogen H, van Weel C. What went and what came? Morbidity trends in general practice from the Netherlands. *The European journal of general practice.* 2008;14 Suppl 1:13-24.

23. Van Weel C. Validating long term morbidity recording. *Journal of epidemiology and community health.* Aug 1995;49 Suppl 1:29-32.

24. van Weel C, Schers H, Timmermans A. Health care in the Netherlands. *Journal of the American Board of Family Medicine : JABFM.* Mar 2012;25 Suppl 1:S12-17.

25. van de Lisdonk EH vdBW, Lagro-Janssen ALM, Schers HJ. . *Ziekten in de huisartspraktijk.*: Elsevier gezondheidszorg; 2008.

26. NHG. Nederlands Huisartsen Genootschap: standaard Depressie (tweede herziening)2012.

27. de Grauw WJ, van den Hoogen HJ, van de Lisdonk EH, van Gerwen WH, van Weel C. Control group characteristics and study outcomes: empirical data from a study on mortality of patients with type 2 diabetes mellitus in Dutch general practice. *Journal of epidemiology and community health.* Apr 1998;52 Suppl 1:9S-12S.

28. Bijl RV, De Graaf R, Ravelli A, Smit F, Vollebergh WA. Gender and age-specific first incidence of DSM-III-R psychiatric disorders in the general population. Results from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Social psychiatry and psychiatric epidemiology.* Aug 2002;37(8):372-379.

29. CBS_Statistics_Netherlands. Causes of death, main primary causes of death, sex. 1990; http://statline.cbs.nl/StatWeb/publication/?DM=SLEN&PA=7052eng&D1=0,7,30,42,52&D2=l&D3=0&D4=0,10,20,30,40,50,60-61&LA=EN&HDR=G1,G2,G3&STB=T&VW=T.

30. Horwitz AV, Wakefield JC. *The loss of sadness; How psychiatry transformed normal sorrow into depressive disorder*: Oxford University Press; 2007.

31. Archer J, Hutchison I, Korszun A. Mood and malignancy: head and neck cancer and depression. *Journal of oral pathology & medicine : official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology.* May 2008;37(5):255-270.

32. Harrison J, Maguire P. Predictors of psychiatric morbidity in cancer patients. *The British journal of psychiatry : the journal of mental science.* Nov 1994;165(5):593-598.

33. Jones RD. Depression and anxiety in oncology: the oncologist's perspective. *The Journal of clinical psychiatry.* 2001;62 Suppl 8:52-55; discussion 56-57.

34. Spencer R, Nilsson M, Wright A, Pirl W, Prigerson H. Anxiety disorders in advanced cancer patients: correlates and predictors of end-of-life outcomes. *Cancer.* Apr 1 2010;116(7):1810-1819.

"Not everything that can be counted counts,

And not everything that counts can be counted."

Albert Einstein (1879 – 1955)

Chapter 3

Low prevalence of depressive disorder in ambulatory advanced cancer patients using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN 2.1)

Published: J Affect Disord. 2012 Feb;136(3):1209-11

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Abstract

Depressive disorder is assumed to be highly prevalent in advanced cancer patients, but the diagnosis of depressive disorder in patients with advanced cancer is difficult. The more robust the assessment instrument to diagnose depressive disorder is, the lower the reported prevalence of depressive disorder in advanced cancer patients. This study confirms a low prevalence of depressive disorder (3%) in 64 advanced cancer outpatients using a robust structured clinical assessment (SCAN 2.1). Furthermore, in this article we discuss possible implications of using predefined psychiatric labeling in the assessment of mood symptoms in advanced cancer patients.

Introduction

A terminal illness is a highly stressful situation that does not only threaten patients' lives but also their quality of life. Consequently, the prevalence of depression is expected to be high in patients in a palliative trajectory. The reported prevalence of depression in these patients varies substantially from 1% to 69% (Hotopf et al., 2002), possibly depending on the use of different screening or assessment tools (Mitchell et al., 2011). This large variation marks a dilemma that is paramount in the clinical practice, research and education of palliative care. On the one hand it seems obvious that depression is common in palliative care and that depression can greatly affect the quality of the remaining lifetime of both patients and caregivers: It imposes a burden and is associated with lower quality of life (Chochinov et al., 2007), increased disability, poor prognosis, higher mortality, longer inpatient episodes and elevated health care costs (Irving and Lloyd-Williams, 2010; Lloyd-Williams et al., 2008, 2009; Rayner et al., 2009; Reeve et al., 2008). Poor treatment adherence, increased difficulties of palliation of physical symptoms such as pain codetermine this outcome.

Yet, on the other hand, feelings of sadness and low mood are quite normal responses of people to negative life events. Therefore, active case finding of depression in palliative care patients can only be successful when it is able to distinguish between 'physiological' reactions and symptoms of pathology. There is growing concern about overtreatment and medicalization of normal sadness (Horwitz and Wakefield, 2007). The issue of diagnosing depression in palliative care receives much attention in research. A recent review studying assessment methods for depression in palliative care patients showed that few studies classify depression by referring to a diagnostic system (Wasteson et al., 2009). Active screening for depression in palliative care patients is advocated (Rayner et al., 2011), but is received with apprehension — in particular from general practitioners because of the problems to distinguish normal sadness from depressive disorder in the context of a palliative trajectory. A recent meta-analysis showed that the prevalence of depression is much lower than previously thought if

depression is defined as a depressive disorder assessed in a psychiatric interview (Mitchell et al., 2011). In this study we report the prevalence of depressive disorder in ambulatory advanced cancer patients as defined by a robust structured clinical assessment to diagnose a depressive disorder (Schedules for Clinical Assessment in Neuropsychiatry). We discuss possible implications of our findings for clinical practice.

Methods

Patients

Patients were included in this study when, according to their treating physician, they suffered from advanced cancer and had an estimated life expectancy between two months and one year. Patients who were unable to speak or read the Dutch language or who suffered from cognitive dysfunction were excluded. From November 2008 until December 2009, patients were recruited from an academic oncology and palliative care outpatient clinic and from different family practices that were affiliated with the Radboud University Nijmegen Medical Centre.

Procedure

After institutional approval of the medical ethical commission, eligible patients were asked by their physician if they were willing to participate in a questionnaire-interview study on depressive complaints. After patients had received information about the study and gave their informed consent by mail, a questionnaire was sent to the patient to complete at home. Within two weeks after completing this questionnaire, all patients, regardless of their score on the questionnaire, underwent a face-to-face diagnostic psychiatric assessment interview (SCAN 2.1) for depression by a trained interviewer who was blind to the results of the questionnaire.

Questionnaire

The questionnaire that patients completed before the assessment included demographic information and a self-report depression scale: the Hospital Anxiety and Depression Scale (HADS), a 14-item self-rating instrument for anxiety and depression (Bjelland et al., 2002; Zigmond and Snaith, 1983). The HADS has been validated in the general population and in cancer patients (Mitchell et al., 2010; Mykletun et al., 2001; Vodermaier et al., 2009).

Schedules for Clinical Assessment in Neuropsychiatry (SCAN 2.1)

The face-to face assessment consisted of a psychiatric inter- view (SCAN 2.1) by a trained interviewer. The SCAN 2.1 is a semi-structured psychiatric interview that has been developed by the World Health Organization. The SCAN 2.1 is a validated and reliable instrument to diagnose mood disorders (Fink et al., 2004). The computer program that processed the data of the interviews generated diagnoses according to the DSM-IV. An interview book was used by a trained general practitioner who used the Sections 3, 4, 6, 7 and 8 that assess stress, depression and anxiety (Giel and Nienhuis, 1992).

Results

Of 175 patients that were identified as eligible for this study, 86 gave informed consent. Of these, twenty patients dropped out because of fast deterioration or imminent death. One patient dropped out because she did not match the inclusion criteria. One patient dropped out because the interview was not performed by a trained interviewer. Eventually, sixty- four patients completed the study (37% men, 63% women, age ranged from 45 to 89 years with a mean of 65 years). All patients suffered from advanced cancer. Most frequent were patients with nephroblastoma (17%), coloncarcinoma (20%), prostate carcinoma (14%) and breast cancer (11%). Within three months, 10 patients (16%) had died and with- in six months 21

patients (34%) had died. The mean HADS-T score was 10.0 (SD 7.4), the mean HADS-D score was 5.7 (SD 4.2), the mean HADS-A score was 4.6 (SD 3.8) (Table 1).

Table 1. Patient scores Hospital Anxiety and Depression Scale

	Mean (SD)	Range
HADS-T	10.0 (7.4)	0 – 31
HADS-D	5.7 (4.2)	0 – 19
HADS-A	4.6 (3.8)	0 – 16

The SCAN 2.1 identified 2 patients (3%) as suffering from a major depressive episode. No anxiety disorders were diagnosed in this patient sample.

Discussion

In this advanced cancer patient sample, only 3% of patients were suffering from a depressive disorder as defined by a robust diagnostic instrument (SCAN 2.1) for detecting a depressive disorder. Most studies on depression in palliative care report higher prevalence of depression in palliative care patients (Mitchell et al., 2011).

The low prevalence found in this study, could be explained by selection bias. This study recruited patients with an estimated life expectancy of less than a year, whereas other studies use varying definitions of a palliative care patient (patients receiving non-curative treatment; patients in hospice settings; patients with irresolvable physical complications). Another possible selection bias could be that patients who suffer from depression are less likely to participate in a study on depression. However, the scores on the self-report depression instrument (HADS) vary considerably as indicated by a wide range and high standard deviation, pointing to a variety of depressive symptom bur- den in this sample. Another reason for the low prevalence found in this study could be the fact that the interview was performed by a

general practitioner. General practitioners who perform a psychiatric interview, in which a clinical assessment is made, might attribute symptoms of depression more to the context of the palliative care situation and therefore not classify the symptoms as pathological (Warmenhoven et al., 2012).

Remarkably, none of the patients in this sample was diagnosed with an anxiety disorder. A hypothesis for this could be that the SCAN 2.1 has two entry questions for the section anxiety. These questions merely focus on anxiety disorders that are either accompanied with vegetative symptoms or that are related to a specific situation (fobic disorders).

Reported prevalence of depression is dependent on the method of assessment of depression. Much effort has been put into applying robust methods for the assessment of depression. The more robust the method is, the lower the prevalence of depression is found (Mitchell et al., 2011). Previous studies do not support the common clinical assumption that the prevalence of depressive and anxiety disorders increases as death nears. However, patients' level of physical distress, acknowledgment of terminal illness, and wish to die, possibly reflecting acceptance of dying, increased as death approached (Lichtenthal et al., 2009).

Mood symptoms are influenced by the burden of physical symptoms, social issues and spiritual wellbeing (Lo et al., 2010; Rodin et al., 2009). Consequently, depression is influenced by these different dimensions, especially in the context of a palliative care patient, yet the assessment of depression is very often based on the application of a psychiatric classification that does not take into account much of the context of the patient. From a clinical point of view, it can be more important to find a specific method to better identify a patient with a high burden of depressive symptoms who would benefit from a specific intervention, than to identify patients with a clinical depressive disorder. It might prove necessary to focus our attention on patients' needs rather than relying on predefined psychiatric labeling. Psychiatric labeling in palliative care patients could be a

threat to the internal validity of the multifaceted concept of depression that we are aiming for in palliative care patients. We conclude that a psychiatric interview may not be the most adequate tool for assessment of depression in palliative care patients. Reeve et al. (2008) suggest that clinical practice and care of individual patients may be better supported by development of a prognostic index considering the predictive power of depressive symptoms and risk factors on well-being. We suggest redefining our goal from detecting depressive disorder in advanced cancer patients to identifying patients with high depressive symptom burden who would benefit from an intervention and who have a need for support.

References

Bjelland, I., Dahl, A.A., Haug, T.T., Neckelmann, D., 2002. The validity of the Hospital anxiety and depression scale. An updated literature review. Journal of Psychosomatic Research 52 (2), 69–77.

Chochinov, H.M., Kristjanson, L.J., Hack, T.F., Hassard, T., McClement, S., Harlos, M., 2007. Burden to others and the terminally ill. Journal of Pain and Symptom Management 34 (5), 463–471.

Fink, P., Orbol, E., Hansen, M.S., Sondergaard, L., De, J.P., 2004. Detecting mental disorders in general hospitals by the SCL-8 scale. Journal of Psychosomatic Research 56 (3), 371–375.

Giel, R., Nienhuis, F.J., 1992. SCAN 2.1 Vragenschema's voor de klinische beoordeling in de neuropsychiatrie.

Horwitz, A.V., Wakefield, J.C., 2007. The Loss of Sadness; How Psychiatry Transformed Normal Sorrow into Depressive Disorder. Oxford University Press.

Hotopf, M., Chidgey, J., Addington-Hall, J., Ly, K.L., 2002. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. Palliative Medicine 16 (2), 81–97.

Irving, G., Lloyd-Williams, M., 2010. Depression in advanced cancer. Journal of Oncology Nursing 14 (5), 395–399.

Lichtenthal, W.G., Nilsson, M., Zhang, B., Trice, E.D., Kissane, D.W., Breitbart, W., Prigerson, H.G., 2009. Do rates of mental disorders and existential distress among advanced stage cancer patients increase as death approaches? Psycho-Oncology 18 (1), 50–61.

Lloyd-Williams, M., Reeve, J., Kissane, D., 2008. Distress in palliative care patients: developing patient-centred approaches to clinical management. European Journal of Cancer 44 (8), 1133–1138.

Lloyd-Williams, M., Shiels, C., Taylor, F., Dennis, M., 2009. Depression — an independent predictor of early death in patients with advanced cancer. Journal of Affective Disorders 113 (1–2), 127–132.

Lo, C., Zimmermann, C., Rydall, A., Walsh, A., Jones, J.M., Moore, M.J., Shepherd, F.A., Gagliese, L., Rodin, G., 2010. Longitudinal study of depressive symp- toms in patients with metastatic gastrointestinal and lung cancer. Journal of Clinical Oncology 28 (18), 3084–3089.

Mitchell, A.J., Meader, N., Symonds, P., 2010. Diagnostic validity of the Hospital Anxiety and Depression Scale (HADS) in cancer and pallia- tive settings: a meta-analysis. Journal of Affective Disorders 126 (3), 335–348.

Mitchell, A.J., Chan, M., Bhatti, H., Halton, M., Grassi, L., Johansen, C., Meader, N., 2011. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. The Lancet Oncology 12 (2), 160–174.

Mykletun, A., Stordal, E., Dahl, A.A., 2001. Hospital Anxiety and Depression (HAD) scale: factor structure, item analyses and internal consistency in a large population. The British Journal of Psychiatry 179, 540–544.

Rayner, L., Loge, J.H., Wasteson, E., Higginson, I.J., 2009. The detection of depression in palliative care. Current Opinion in Supportive and Palliative Care 3 (1), 55–60.

Rayner, L., Price, A., Hotopf, M., Higginson, I.J., 2011. The development of evidence-based European guidelines on the management of depression in palliative cancer care. European Journal of Cancer 47 (5), 702–712.

Reeve, J.L., Lloyd-Williams, M., Dowrick, C., 2008. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. Palliative Medicine 22 (4), 383–391.

Rodin, G., Lo, C., Mikulincer, M., Donner, A., Gagliese, L., Zimmermann, C., 2009. Pathways to distress: the multiple determinants of depression, hopelessness, and the desire for hastened death in metastatic cancer patients. Social Science & Medicine 68 (3), 562–569.

Vodermaier, A., Linden, W., Siu, C., 2009. Screening for emotional distress in cancer patients: a systematic review of assessment instruments. Journal of the National Cancer Institute 101 (21), 1464–1488.

Warmenhoven, F., Rijswijk, E., van Hoogstraten, E., van Spaendonck, K., Lucassen, P., Prins, J., Vissers, K., van Weel, C., 2012. How family physicians address diagnosis and management of depression in palliative care patients. Annals of Family Medicine 10(4):330-6

Wasteson, E., Brenne, E., Higginson, I.J., Hotopf, M., Lloyd-Williams, M., Kaasa, S., Loge, J.H., 2009. Depression assessment and classification in palliative can- cer patients: a systematic literature review. Palliative Medicine 23 (8), 739–753.

Zigmond, A.S., Snaith, R.P., 1983. The hospital anxiety and depression scale. Acta Psychiatrica Scandinavica 67 (6), 361–370.

"Measure what can be measured,

and make measurable what cannot be measured."

Galileo Galilei (1564 – 1642)

Chapter 4

The Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depressive disorder in Dutch advanced cancer patients

Published: Support Care Cancer 2012 Feb;20(2):319-24

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Abstract

Purpose: Depression is highly prevalent in advanced cancer patients, but the diagnosis of depressive disorder in patients with advanced cancer is difficult. Screening instruments could facilitate diagnosing depressive disorder in patients with advanced cancer. The aim of this study was to determine the validity of the Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depressive disorder in advanced cancer patients.

Methods: Patients with advanced metastatic disease, visiting the outpatient palliative care department, were asked to fill out a self-questionnaire containing the Beck Depression Inventory (BDI-II) and a single screening question “Are you feeling depressed?” The mood section of the PRIME-MD was used as a gold standard.

Results: Sixty-one patients with advanced metastatic disease were eligible to be included in the study. Complete data were obtained from 46 patients. The area under the curve of the receiver operating characteristics analysis of the BDI-II was 0.82. The optimal cut-off point of the BDI-II was 16 with a sensitivity of 90% and a specificity of 69%. The single screening question showed a sensitivity of 50% and a specificity of 94%.

Conclusions: The BDI-II seems an adequate screening tool for a depressive disorder in advanced cancer patients. The sensitivity of a single screening question is poor.

Introduction

Depression seems highly prevalent in patients with advanced cancer. In different studies, a large variation of prevalence of depression in advanced cancer (4% to 58%) is reported [1]. This large variation in prevalence can be explained by the use of different research samples with different risk factors like cancer type, age, sex, history of depression, alcohol abuses, and by the use of different assessment tools [2–4]. In some patients with advanced cancer, a depressive disorder as defined in the DSM-IV can be diagnosed, whereas others experience symptoms of depression and low mood but do not meet the diagnostic criteria of the DSM-IV. Both situations are associated with a lower quality of life and consequently cause a burden for the patient and his caregivers [5, 6].

In patients with advanced cancer, several factors can influence the diagnostic process of depression. Firstly, specific physical signs and symptoms presented in a patient with advanced cancer, such as weight loss or fatigue, can originate from advanced cancer or from depression [7]. Physical symptoms and depressive symptoms may partly share a common pathway of distress [8], which makes it difficult to distinguish between cause and effect: physical symptoms may increase a depressed feeling on the one hand and on the other hand a depressed feeling may result in more physical complaints [9, 10]. Secondly, it may be difficult to distinguish grief from depression in patients with advanced cancer [11]. Thirdly, for both patient and physician emotional issues are difficult to address in this phase of life. Only a minority (17%) of advanced cancer patients explicitly express their emotional distress to their physician and physicians themselves do not often address emotional problems in conversations with advanced cancer patients, possibly because they do not feel well trained in communication with palliative care patients [12, 13, 17].

The recognition of depression is not optimal for oncologists [14, 15] and other physicians as well [16] because of the reasons mentioned. If patients with advanced cancer who are suffering from a depressive disorder are not

identified, they will not be able to benefit from the pharmacological and psychological treatments that are considered beneficial [16, 18, 19].

Screening instruments could facilitate recognizing depressive disorder in this population [20]. Systematic screening for symptoms like depression fits into the principles of advanced care planning that is promoted in patients with advanced cancer or in need of palliative care [21]. The ideal screening instrument combines a high sensitivity with a high specificity. When using a cut score in a screening instrument, the optimal cut score for a specific patient group can be determined with a receiver operating characteristics analysis. The usefulness of a screening tool depends on the positive and negative predictive value considering the main aim of the screening. When screening for depression in patients in a palliative trajectory, given the vulnerability of these patients and the consequences of depression for their health status and quality of life, a high negative predictive value seems most important. False positive cases can be ruled out in further diagnostic assessment.

Recently, screening for depression with one or two simple questions was suggested to be highly specific [22], although different studies report different findings on psychometric values of short screening methods [23]. A short screening method is appealing because the costs would be considerably lower than other methods for diagnosing depressive disorder; it is time efficient and many people can be screened for depression in a quick and simple way.

The Beck Depression inventory (BDI-II) is one of the most widely used screening tools for depression and it may provide a useful method for screening for depression in palliative care [24–26]. This inventory is a self-report questionnaire that was originally developed to rate the severity of depressive symptoms [27]. The BDI-II has shown good psychometric qualities as a screening tool for depression. However, the BDI-II contains several items on somatic symptoms of depression (for example, questions about loss of energy, fatigue, and loss of appetite), which may lead to an

overestimation of positive cases in a patient group with somatic illness. The BDI-II has been validated in many samples including cancer patients [28].

The aim of the present study was to assess the validity of the BDI-II and a single screening question as screening tools for depression in Dutch-speaking patients with advanced cancer. The hypothesis was that both the BDI-II and the single screening question are adequate screening tools for depressive disorders in Dutch advanced cancer patients.

Methods

Ethical approval and informed consent

The study received approval of the medical ethical committee of the Radboud University Nijmegen Medical Centre. After obtaining informed consent, patients were asked to fill out a self-report questionnaire. Patients who were unable to read and understand the Dutch language were excluded from participating in this study.

Sample and design

From December 2003 until March 2007, all consecutive patients with advanced, non-curable stages of metastatic cancer referred to a new outpatient palliative care department at the Radboud University Nijmegen Medical Centre were asked to participate in the study by their treating physician. Patients considered by their physician to be too ill to participate were not asked.

Questionnaires and data collection

Patients were asked to provide demographic information. The BDI-II and a single screening question “Are you feeling depressed?” were used to screen for depression. The BDI-II is a 21-item self-report questionnaire with four response options for each item. Items of the BDI-II relate to different symptoms of depression such as sadness, hopelessness, self-blame, guilt,

fatigue, and loss of appetite. On each item, patients are asked to choose the statement that best describes their attitude towards the item. Scores of the BDI-II can vary from 0 to 63 and are often classified as follows: 0–13 no depression, 14–19 mild depression, 20–28 moderate depression, and 29–63 severe depression [29].

Patients were asked to fill out the questionnaire during their visit at the outpatient department or at home. The mood section of the PRIME-MD [30] was administered as a gold standard for the clinical diagnosis of a depressive disorder by the physician, who was blind to the results of the questionnaire. The PRIME-MD is a structured interview based on the DSM-IV classification for depressive disorder and has been validated in oncology patients [31]. The PRIME-MD provides standardized questions that focus directly on key diagnostic symptoms and a depressive disorder was diagnosed when patients fulfilled the DSM-IV criteria. The time required to complete the PRIME-MD mood section is approximately 10 min.

Statistical analysis

Statistical analysis was performed with SPSS 16.0. Means, sensitivity, specificity, and positive and negative predictive value were computed. A receiver operating characteristics (ROC) analysis was performed to determine the optimal cut score for the BDI-II as a screen for depression in this population.

Results

From December 2003 until March 2007, 61 patients (29 men, 32 women) were eligible to be included in the study. The inclusion period of this study has been relatively long because the outpatient department for palliative care patients was a new facility in the hospital and, consequently, referral numbers were low. Patients suffered from a variety of advanced cancers (23% colon carcinoma, 16% breast cancer, 8% head and neck cancer, 8%

lung cancer, 45% some other malignancy). Of the 61 eligible patients, 20 patients (33%) deceased within 6 months. Seven eligible patients refused to participate in the study.

Among the 54 patients who enrolled in the study, administration of the PRIME-MD was not completed in eight patients (Fig. 1). Therefore, complete data were obtained of 46 patients (26 women, 20 men, mean age 60 years, median age 58 years). The mean BDI-II score of the 46 patients who participated in the study was 14.7 (SD 9.9).

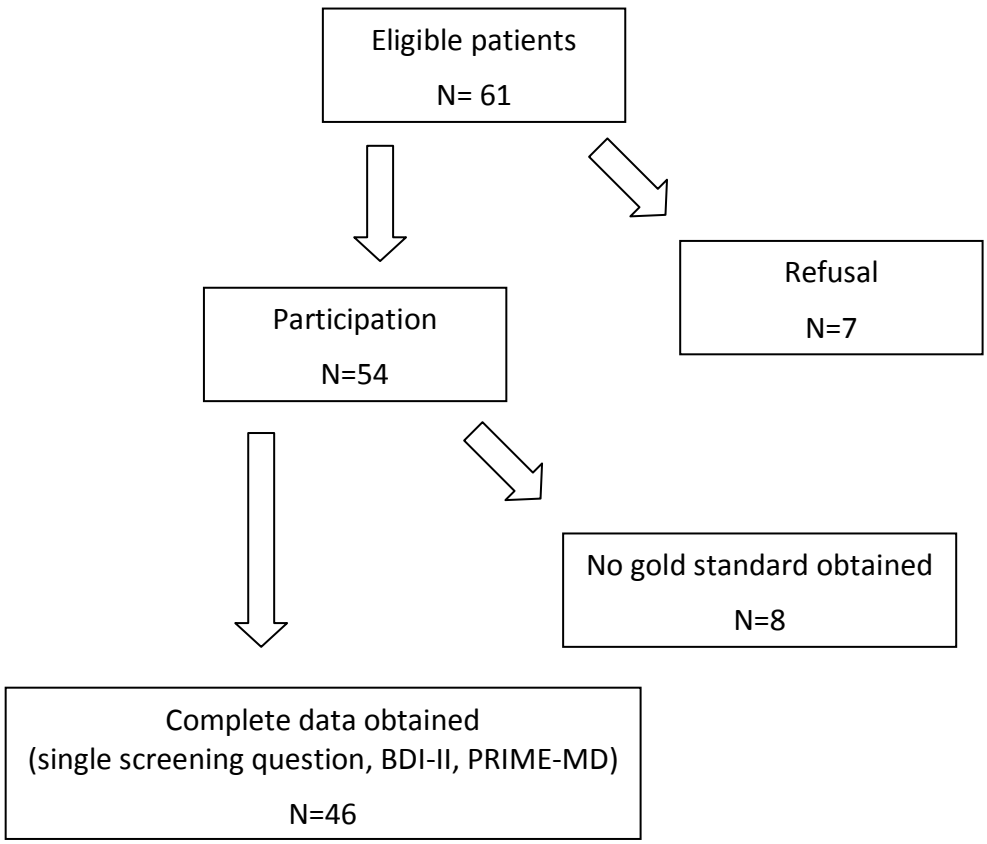

Figure 1. Inclusion of patients

Ten out of 46 patients (22%) were diagnosed with a major depressive disorder using the PRIME-MD. The area under the curve (AUC) of the ROC analysis of the BDI-II was 0.82 (Fig. 2). Using the traditional cut score of 14, the BDI-II demonstrated 90% sensitivity and 64% specificity. The positive and negative predictive values were 45% and 97%, respectively. However, using a higher cut score of 16 retained high sensitivity (90%) while increasing specificity to 69%. The positive and negative predictive values were 55% and 96%, respectively. The single screening question demonstrated 50% sensitivity and 94% specificity. The positive and negative predictive values of

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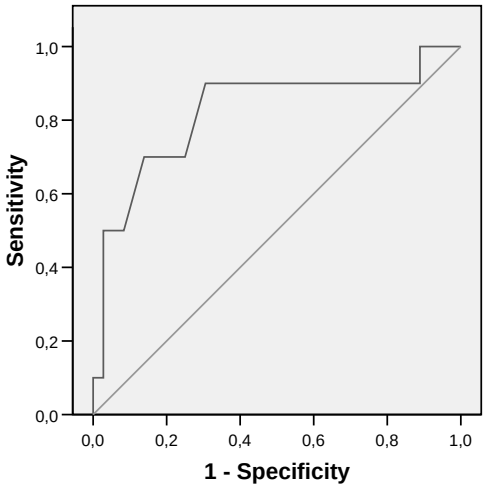

Fig. 1: ROC BDI-II

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Table 1. Psychometric properties of single screening question and BDI-II

	Sensitivity (%)	Specificity (%)	Positive predictive value (%)	Negative predictive value (%)
Single screening question	50	69	71	87
BDI-II (cut score 14)	90	64	45	97
BDI-II (cut score 16)	90	69	55	96

Discussion

This study shows that the BDI-II is an adequate screening tool to detect depressive disorder in patients with advanced cancer. Using a cut-off point of 16, it has good sensitivity (90%) and acceptable specificity (69%). The single screening question performed unsatisfactory, demonstrating only 50% sensitivity and 94% specificity. Given the consequences of not recognizing a depression in this vulnerable patient group and the possibility to rule out depression in further diagnostic assessment in patients who screen positive for depression, a high sensitivity and high negative predictive value of screening tools are important and a lower specificity and positive predictive value are accepted.

The results of this study differ somewhat from previous findings on psychometric properties of the Beck Depression Inventory in a cancer patient sample. Katz et al. found that with a cut score of 16 the BDI had a sensitivity of 73% and specificity of 100% in a sample of 60 ambulatory patients with a malignancy of the head and neck region and identified the optimum cut score at 13 with a sensitivity of 92% and a specificity of 90% [32]. In the present study, the participants originated from a heterogeneous group of patients with advanced cancer, whereas Katz et al. used a more

homogeneous group of ambulatory head and neck cancer patients. Furthermore, Katz et al. used a different instrument, the Schedule for Affective Disorders and Schizophrenia, as a gold standard.

A possible shortcoming of the BDI-II as a screening tool in advanced cancer patients is that the number of identified cases could be overestimated because of the somatic items of the questionnaire. The specificity of the BDI-II in advanced cancer patients might be increased by excluding the somatic items (e.g., weight loss, loss of appetite, etc.). The Beck Depression Inventory Short Form (BDI-SF), consisting of seven items tapping exclusively affective symptoms, might be more appropriate for this population. Love et al. performed a study in 227 women with metastatic breast disease in which the BDI-SF had a specificity of 63% and a positive predictive value of 0.52 [33]. This needs further study to determine the psychometric properties in a more heterogeneous patient group.

The sensitivity of the single screening question in this study appeared 50%, which is almost similar to the reported sensitivity of 55% in an earlier study in 74 palliative care patients [34]. Other previous studies, however, report a much higher sensitivity of a single screening question in palliative care patients (72–100%) [23, 35]. The low sensitivity of the single screening question in this study may point to difficulties regarding the meaning of the question. The word depression knows different translations and different interpretations in the Dutch language. The exact words that have been used might have influenced the results [36].

This study has some limitations. Firstly, the relatively small sample size was recruited from the recently started outpatient department for palliative care. Small sample size is not unusual in palliative care, in which recruitment is difficult and dropout rates are high due to deterioration of health status and death. Secondly, the selection of participants in this study was performed by the treating physician. The number of patients that the physicians considered too ill to participate was not recorded. In general, though, the participation of patients in research is high, when their

"personal" treating physician invites them for participation, but it might introduce selection bias if the physician leaves out highly distressed patients. Given the relatively high scores on the BDI-II in this sample, severe bias seems unlikely. Thirdly, we used the PRIME-MD as a gold standard. The PRIME-MD and other psychiatric interviews are not validated for advanced cancer patients specifically. However, they have been validated in cancer patients [31].

This study offers a contribution to the diagnosis and screening of depressive disorder in advanced cancer patients. The Beck Depression Inventory offers a method for brief and sensitive detection of depressive disorder in this specific group of patients. If used systematically in all advanced cancer patients, this screening tool may increase and improve physician's evaluations of not only somatic, but also psychological complaints of their patients.

To our knowledge, this is the first validation study of the Dutch Beck Depression Inventory and of a single screening question to screen for depression in a heterogeneous group of advanced cancer patients. Secondly, it gives a prevalence of depression in advanced cancer patients, based on a clinical diagnosis with the PRIME-MD, contrary to prevalence numbers acquired by questionnaires. In clinical practice, the screening tool can serve to alert physicians to the possibility of depressive disorder and hence give attention to the mental health status of palliative care patients, if necessary followed by further diagnostic assessment and appropriate treatment.

Conclusions

The BDI-II seems to be an adequate screening tool for depressive disorders in Dutch advanced cancer patients when using a cut score of 16. The single screening question is less adequate to detect depression in palliative care patients, considering the low sensitivity.

Diagnosing depression in patients with advanced cancer remains a challenge. Using a valid screening tool can facilitate the process of diagnosing depression in this specific group of patients.

References

1. Stiefel R, Die TM, Berney A, Olarte JM, Razavi A (2001) Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. Support Care Cancer 9:477–488
2. Kelly J, Turner BJ (2009) Depression in advanced physical illness: diagnostic and treatment issues. Med J Aust 190:S90–S93
3. Massie MJ (2004) Prevalence of depression in patients with cancer. J Natl Cancer Inst Monogr (32):57–71
4. Reeve JL, Lloyd-Williams M, Dowrick C (2008) Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. Palliat Med 22:383–391
5. Chochinov HM, Kristjanson LJ, Hack TF, Hassard T, McClement S, Harlos M (2007) Burden to others and the terminally ill. J Pain Symptom Manage 34:463–471
6. Henoch I, Bergman B, Gustafsson M, Gaston-Johansson F, Danielson E (2007) The impact of symptoms, coping capacity, and social support on quality of life experience over time in patients with lung cancer. J Pain Symptom Manage 34:370– 379
7. Hotopf M, Chidgey J, Ddington-Hall J, Ly KL (2002) Depression in advanced disease: a systematic review. Part 1. Prevalence and case finding. Palliat Med 16:81–97
8. Lo C, Zimmermann C, Rydall A, Walsh A, Jones JM, Moore MJ, Shepherd FA, Gagliese L, Rodin G (2010) Longitudinal study of depressive symptoms in patients with metastatic gastrointestinal and lung cancer. J Clin Oncol 28:3084–3089
9. Jacobsen PB, Donovan KA, Weitzner MA (2003) Distinguishing fatigue and depression in patients with cancer. Semin Clin Neuropsychiatry 8:229–240

10. Raison AH, Miller CL (2003) Depression in cancer: new developments regarding diagnosis and treatment. Biol Psychiatry 54:283–294

11. Periyakoil J, Hallenbeck VS (2002) Identifying and managing preparatory grief and depression at the end of life. Am Fam Physician 65:883–890

12. Anderson WG, Alexander SC, Rodriguez KL, Jeffreys AS, Olsen MK, Pollak KI, Tulsky JA, Arnold RM (2008) What concerns me is. Expression of emotion by advanced cancer patients during outpatient visits. Support Care Cancer 16:803– 811

13. Pollak KI, Arnold RM, Jeffreys AS, Alexander SC, Olsen MK, Abernethy AP, Sugg SC, Rodriguez KL, Tulsky JA (2007) Oncologist communication about emotion during visits with patients with advanced cancer. J Clin Oncol 25:5748– 5752

14. Newell S, Sanson-Fisher RW, Girgis A, Bonaventura A (1998) How well do medical oncologists' perceptions reflect their patients' reported physical and psychosocial problems? Data from a survey of five oncologists. Cancer 83:1640–1651

15. Passik SD, Dugan W, McDonald MV, Rosenfeld B, Theobald DE, Edgerton S (1998) Oncologists' recognition of depression in their patients with cancer. J Clin Oncol 16:1594–1600

16. Lloyd-Williams M (2000) Difficulties in diagnosing and treating depression in the terminally ill cancer patient. Postgrad Med J 76:555–558

17. Barclay S, Wyatt P, Shore S, Finlay I, Grande G, Todd C (2003) Caring for the dying: how well prepared are general practitioners? A questionnaire study in Wales. Palliat Med 17:27–39

18. Akechi T, Okuyama T, Onishi J, Morita T, Furukawa TA (2008) Psychotherapy for depression among incurable cancer patients. Cochrane Database Syst Rev (2):CD005537

19. Hopko DR, Robertson SM, Carvalho JP (2009) Sudden gains in depressed cancer patients treated with behavioral activation therapy. Behav Ther 40:346–356

20. Kelly B, McClement S, Chochinov HM (2006) Measurement of psychological distress in palliative care. Palliat Med 20:779– 789

21. Murray SA, Sheikh A, Thomas K (2006) Advance care planning in primary care. BMJ 333:868–869

22. Arroll B, Goodyear-Smith F, Kerse N, Fishman T, Gunn J (2005) Effect of the addition of a "help" question to two screening questions on specificity for diagnosis of depression in general practice: diagnostic validity study. BMJ 331:884

23. Mitchell AJ, Kaar S, Coggan C, Herdman J (2008) Acceptability of common screening methods used to detect distress and related mood disorders—preferences of cancer specialists and non-specialists. Psychooncology 17:226–236

24. Richter P, Werner J, Heerlein A, Kraus A, Sauer H (1998) On the validity of the Beck Depression Inventory. A review. Psychopathology 31:160–168

25. Mystakidou K, Tsilika E, Parpa E, Smyrniotis V, Galanos A, Vlahos L (2007) Beck Depression Inventory: exploring its psychometric properties in a palliative care population of advanced cancer patients. Eur J Cancer Care Engl 16:244– 250

26. Vodemaier A, Linden W, Siu C (2009) Screening for emotional distress in cancer patients: a systematic review of assessment instruments. J Natl Cancer Inst 101:1464–1488

27. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J (1961) An inventory for measuring depression. Arch Gen Psychiatry 4:561– 571

28. Hopko DR, Bell JL, Armento ME, Robertson SM, Hunt MK, Wolf NJ, Mullane C (2008) The phenomenology and screening of clinical depression in cancer patients. J Psychosoc Oncol 26:31– 51

29. Beck AT, Steer RA, Brown GK (1996) Manual for the Beck Depression Inventory-II. Ref Type: Report

30. Fraguas R Jr, Henriques SG Jr, De Lucia MS, Iosifescu DV, Schwartz FH, Menezes PR, Gattaz WF, Martins MA (2006) The detection of depression in medical setting: a study with PRIME- MD. J Affect Disord 91:11–17

31. Leopold KA, Ahles TA, Walch S, Amdur RJ, Mott LA, Wiegand- Packard L, Oxman TE (1998) Prevalence of mood disorders and utility of the PRIME-MD in patients undergoing radiation therapy. Int J Radiat Oncol Biol Phys 42:1105–1112

32. Katz MR, Kopek N, Waldron J, Devins GM, Tomlinson G (2004) Screening for depression in head and neck cancer. Psychooncology 13:269–280

33. Love AW, Grabsch B, Clarke DM, Bloch S, Kissane DW (2004) Screening for depression in women with metastatic breast cancer: a comparison of the Beck Depression Inventory Short Form and the Hospital Anxiety and Depression Scale. Aust N Z J Psychiatry 38:526–531

34. Lloyd-Williams M, Dennis M, Taylor F (2004) A prospective study to compare three depression screening tools in patients who are terminally ill. Gen Hosp Psychiatry 26:384–389

35. Chochinov HM, Wilson KG, Enns M, Lander S (1997) "Are you depressed?" Screening for depression in the terminally ill. Am J Psychiatry 154:674–676

36. Noguera A, Centeno C, Carvajal A, Tejedor MA, Urdiroz J, Martinez M (2009) Spanish "fine tuning" of language to describe depression and anxiety. J Palliat Med 12:707–712

"….the dimensions of interconnectedness are without end.

There is nothing independent."

Alex Grey

Chapter 5

Screening Instruments for Depression in Advanced Cancer Patients: What Do We Actually Measure?

Published: Pain Pract. **2012 Nov 16. [Epub ahead of print]**

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Abstract

Background: Patients in a palliative care trajectory frequently suffer from depression. To distinguish depression from normal sadness, the use of screening instruments could facilitate the diagnostic process. However, in palliative care, screening instruments may not discern physical symptom burden from psychological distress, due to the high number of physical symptoms in palliative patients.

Objectives: The aim of this study was to explore physical symptom burden and psychological distress in patients with advanced cancer in relation to scores on screening instruments for depression.

Methods: Patients with advanced cancer were asked to fill out the Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC), Hospital Anxiety and Depression Scale (HADS), and Memorial Symptom Assessment Scale Short Form (MSAS-SF). The relationship between scores on screening tools for depression and different physical symptom clusters was explored.

Results: In the sample of 65 patients, screening instruments for depression correlated highly with different somatic symptom clusters. The BDI-II cognitive subscale was the only scale that was not significantly correlated with any of the somatic symptom clusters.

Conclusion: Screening tools for the detection of depression in patients with advanced cancer may not provide an accurate evaluation of depression. These tools seem to measure physical symptom burden as well, especially when patients suffer from symptoms of the clusters fatigue/anorexia/ cachexia, neuropsychology, debility, or pain. In this study, the BDI-II cognitive subscale seems to differentiate best from somatic symptom burden.

Introduction

Patients in a palliative care trajectory frequently suffer from a wide range of physical and psychological complaints. In this conglomeration of symptoms, it can be difficult to diagnose mood disorders. Akechi et al.[1] reported that the prevalence of major depressive disorder and adjustment disorders in incurable cancer patients is respectively 6.7% and 16.3%. However, in other studies, the reported prevalence of depression varies substantially from 1% to 69%.[2] This large variation is possibly depending on the use of different screening or assessment tools for depression.[3] Depression in palliative care patients is shown to be associated with poor outcomes in the palliation of physical symptoms, treatment adherence, and prognosis. Consequently, depression causes a burden for both patient and caregivers.[4,5] Moreover, it is associated with increased disability, mortality, inpatient episodes, and healthcare costs.[6-9]

In clinical practice, physicians are confronted with the challenging task to differentiate normal sadness and distress reactive to a palliative care situation, from pathological sadness or mood disorder that requires psychological or psychiatric intervention. Additionally, symptoms like fatigue, weight loss, concentration problems, and preoccupation with death that are common in depressive states, but also in terminal illness itself, can be confusing in making the correct diagnosis. Furthermore, both physicians and palliative care patients find it difficult to address emotional problems.[10,11] This explains why the diagnosis of depression in these patients can be easily missed. A report from the European Association for Palliative Care indicates that depression may remain unrecognized in more than 50% of depressed medically ill patients.[12]

The systematic use of a specific screening instrument for the detection of depression could be of value in the process of assessing palliative care patients for depression.[13] However, a recent review demonstrated that 106 different assessment methods are used for depression in palliative care and there is no consensus on which screening instrument is best for the specific

situation of a palliative care setting.[14] Many screening instruments may measure distress without identifying the nature of the distress. The relationship between physical and psychological distress can be complex. A recent study showed that a high expression of physical symptoms in patients with advanced cancer is related to a high prevalence of mood disorders.[15] The Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC), and the Hospital Anxiety and Depression Scale (HADS) are validated screening tools in patients with cancer, and these screening tools are available in the Dutch language.[16] Furthermore, HADS is suggested as a screening tool in Dutch palliative care guidelines.[17] In this study, we explore depressive symptom burden as measured by the BDI-II, BDI-PC, and HADS in relation to physical symptom burden. We explore whether patients with a high or low score on screening instruments for depression differ in their physical symptom profile.

Methods

Sample and Design/Procedure

This study was an observational questionnaire study. Patients included in this study were patients with advanced cancer who had an estimated life expectancy of 2 months to 1 year. Patients who were unable to speak or read the Dutch language or who suffered from cognitive dysfunction were excluded.

From November 2008 to December 2009, ambulatory patients with advanced cancer were recruited from an academic oncologic and palliative care outpatient clinic and from different family practices that were affiliated with the Radboud University Nijmegen Medical Centre.

The Institutional Ethical Committee of the Radboud University Nijmegen Medical Centre approved the study. Eligible patients selected by their physician received written information about the study and could give

informed consent. After obtaining informed consent, a questionnaire was sent to the patient to complete at home. The questionnaire contained questions concerning demographic information, the BDI-II, the HADS, and the Memorial Symptom Assessment Scale Short Form (MSAS-SF), which is a symptom burden questionnaire. The complete set of questionnaires contained 87 questions. Within 2 weeks after completing the questionnaire, patients were asked to complete the Beck Depression Inventory Primary Care (BDI-PC). This screening tool was not administered at the same time as the first questionnaire because all BDI-PC items are part of the BDI-II.

Single omissions within the questionnaires were replaced with a mean score of the other questions on the (sub)scale. Whenever the answers for more than 2 questions on a (sub)scale were missing, the score on the (sub)scale was not used in the analysis.

Questionnaires

Demographics and History of Depression

Patients were asked their age, civil state, socio-economic information, education, and whether they had a history of depression.

Beck Depression Inventory and Beck Depression Inventory Primary Care

The BDI-II is a 21-item self-report questionnaire to measure depression with 4 response options for each item. A 3-factor model has been proposed for the BDI-II with a cognitive subscale (7 items), a somatic subscale (9 items), and an affective subscale (5 items).[18] BDI-II scores can vary from 0 to 63. Originally, the BDI was developed to measure the severity of depression.

The BDI-II is validated as a screening instrument in general populations as well as in patients with different kinds of physical illness, like chronic pain and myocardial infarction.[19-22] The psychometric properties of the BDI-II proved satisfactory in oncology patients. Using a cutoff point of 14, it showed a sensitivity of 90% and a specificity of 86%.[23] The BDI-II distinguishes itself from other assessment instruments for depression by the

relatively high number of psychological and cognitive items and therefore might be applicable in patients with physical illness.[24]

The BDI-PC is a short form of the BDI-II developed to improve the screening of depression in patients with physical illness. This questionnaire consists of 7 cognitive and affective items of the BDI-II. The BDI-PC with a cutoff point of 4 demonstrated a sensitivity of 82% and specificity of 82% in medical inpatients.[25] The BDI-PC has been validated in patients with heterogeneous medical conditions.[26,27]

Hospital Anxiety and Depression Scale

The HADS is a 14-item, 4-point scale self-rating instrument for anxiety and depression developed for patients with both somatic and mental problems. Patients screen positive if they score 12 or higher on the total scale or 8 or higher on the subscales depression or anxiety.[28] The HADS has been validated in the general population, in patients with cancer, and in the palliative care setting.[16, 29-31] The HADS is suggested as a screening tool in Dutch palliative care guidelines.[17]

Memorial Symptom Assessment Scale — Short Form

The MSAS was developed to evaluate symptom prevalence, frequency, severity, and burden. The MSAS evaluates 32 physical and psychological symptoms.

The MSAS has a high internal consistency and is reported to be a reliable measure of symptom distress in noncancer, as well as cancer patients.[32] A shortened form of this scale (MSAS-SF), which symptoms are only evaluated on the burden that they cause, has been validated for patients with cancer.[33] Within the MSAS- SF, 3 subscales have been identified by factor analysis in earlier research: distress, psychological symptoms, and physical symptoms.[34]

Furthermore, derived from the MSAS-SF, different symptom clusters were described based on the clusters that Kirkova et al.[35] describe in recent

studies. These clusters are fatigue/anorexia/cachexia cluster, neuropsychological cluster, upper gastrointestinal tract cluster, nausea/vomiting cluster, aerodigestive cluster, debility cluster, and pain cluster.

Statistical Analysis

Data were analyzed using SPSS 16.0 (IBM, Amsterdam, the Netherlands). Descriptive statistics were computed. The BDI-PC items were extracted from the BDI-II in order to examine the association between the scores. Correlations between different screening instruments, subscales, and symptom clusters were computed using Spearman's rho for nonparametric data. Nonparametric tests (Mann–Whitney) were performed to explore whether patients with a high or low score on screening instruments for depression differed in their physical symptom profile.

Results

Patient Characteristics

From November 2008 to December 2009, 175 patients were identified as eligible for this study. Of these patients, 86 gave informed consent of which 20 patients dropped out because of fast deterioration or death. One patient dropped out because she did not match the inclusion criteria (Figure 1). Sixty-five patients completed the study (37% men, 63% women, age ranged from 45 to 89 years with a mean of 65 years).

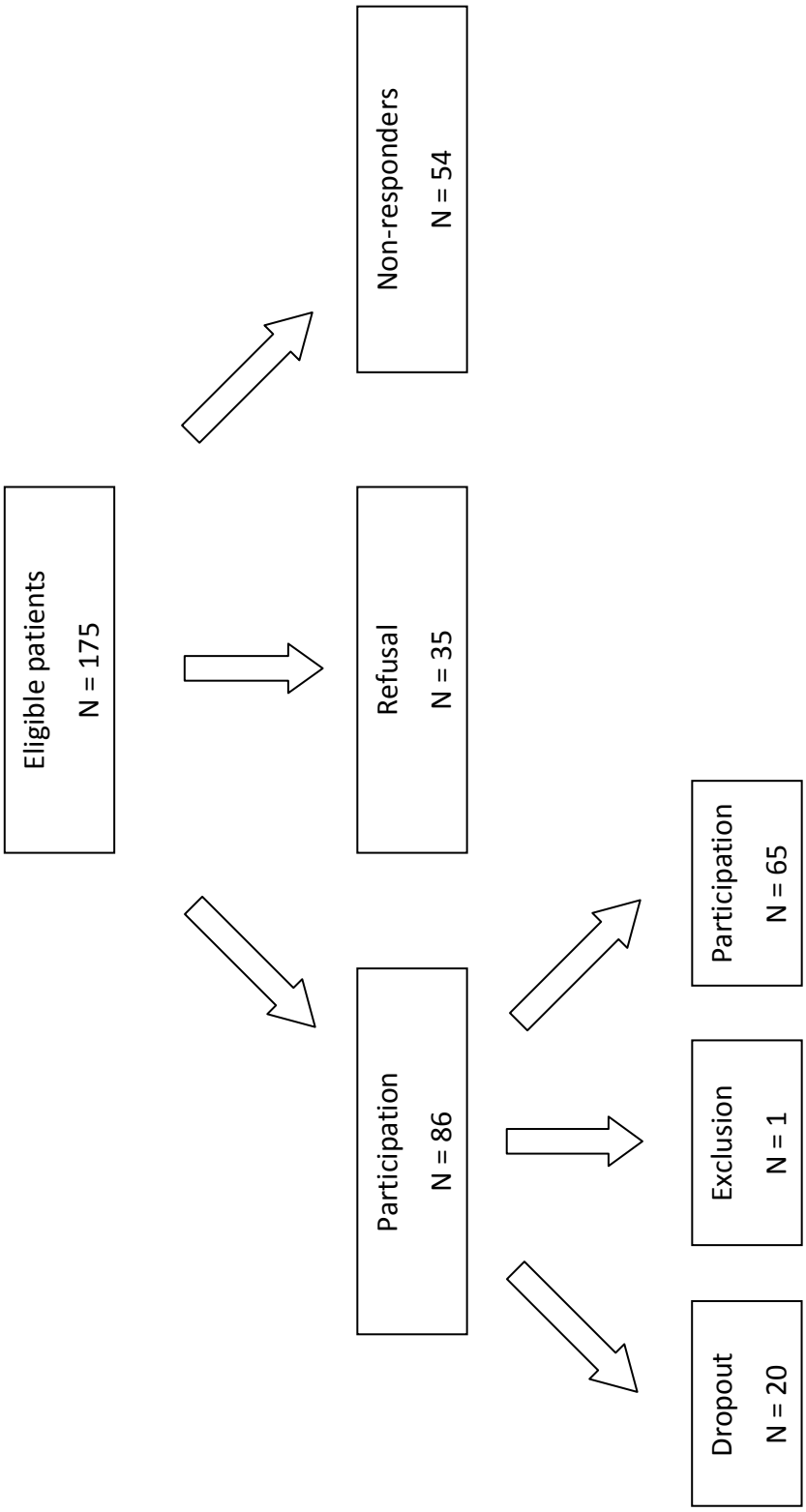

Figure 1. Inclusion of patients

All patients suffered from advanced cancer. Most frequent were patients with nephroblastoma (17%), colon carcinoma (20%), prostate carcinoma (14%), and breast cancer (11%). Other malignancies were carcinoma of the esophagus, carcinoma of the uterus, hepatocellular carcinoma, carcinoid, carcinoma of the pancreas, stomach cancer, glioblastoma, head and neck cancer, lung cancer, and thyroid cancer. Patient self- reported lifetime history of depression was 31%, and 10 patients (14.1%) had been treated with antidepressants previously. Eight patients (12.3%) were treated with an antidepressive agent during the time of the study. The actual reason for prescribing the antidepressive agent (depressive disorder, depressive complaints, neuropathic pain) was not known.

Within 3 months, 10 patients (16%) and within 6 months, 21 patients (34%) had died. Table 1 shows survival time of the eligible patient group specified for participants and nonparticipants.

Table 1. Survival time of eligible patients

	Survival less than 3 months	Survival less than 6 months
Total group (N=175)	35 %	46 %
Participants	20 %	35 %
Non Participants	45 %	54 %

Ten patients (15%) needed help from a caregiver with filling out the questionnaire. Most patients did not have any problems filling out the questionnaire and commented that the questions were easy to answer. Seven patients had 1 question missing on one of the questionnaires. Two patients did not fill out 1 of the 3 pages of the BDI-II, in which cases the BDI-II was excluded from further analysis.

Depression, Anxiety, Distress, and Symptom Burden

In this patient sample, using different screening tools with their cutoff point as proposed in the literature, depression was indicated in 24.6% using the BDI-II, in 23.1% using the subscale depression of the HADS and in 10.8% of patients using the BDI-PC. Using the HADS total score, 36.9% scored positive on distress and 15.4% scored positive on the subscale anxiety.

The mean scores on different screening tools in this patient population are presented in Table 2.

Table 2. Results of screening instruments for depression in patient sample (N=65)

Screening instrument	Percentage of patients that screened positive	Mean (standard deviation)
BDI-II (cut off 14)	24.6 %	11.8 (SD 7.7)
BDI-PC (cut off 4)	10.8 %	1.9 (SD 2.3)
HADS-T (cut off 12)	36.9 %	4.6 (SD 7.4)
HADS depression (cut off 8)	23.1 %	5.7 (SD 4.2)
HADS anxiety (cut off 8)	15.4 %	4.6 (SD 3.8)

Symptoms in the MSAS-SF with a high prevalence (reported in more than 40% of the sample) were lack of concentration; pain; lack of energy; anxiety; dry mouth; nausea; numbness of hands or feet; shortness of breath; feeling sad; worrying; lack of sexual interest; lack of appetite; irritability; change in taste perception; and weight loss. The mean total score on the MSAS-SF was 23.2 (SD 17.8).

Association Between Different Screening Tools for Depression and Symptom Clusters

The BDI-II correlated significantly with HADS scores and physical symptom burden measured with the MSAS- SF and its subscales: distress, psychological and somatic symptom burden. Furthermore, the BDI-II significantly correlated with the symptom clusters fatigue/anorexia/ cachexia, neuropsychology, debility, and pain. The clusters upper GI, nausea/vomiting, and aerodigestive were not significantly correlated with BDI-II scores.

Both the somatic and affective subscales of the BDI-II were significantly correlated with the MSAS-SF and the subscales of the MSAS-SF: distress, psychological symptom burden, and somatic symptom burden. The cognitive subscale of the BDI-II was significantly correlated with the MSAS-SF, the MSAS-SF subscales distress, and psychological symptom burden, but not with the subscale somatic symptom burden. The cognitive subscale did not correlate with any of the symptom clusters.

The BDI-PC correlated with the MSAS-SF and its subscales and also significantly correlated with the BDI- PC that was computed from the BDI-II ($r = 0.78$, $P < 0.0001$).

The HADS total score, the HADS subscale anxiety, and HADS subscale depression all correlated significantly with the MSAS-SF, as well as with the MSAS-SF subscale distress, MSAS-SF subscale psychological symptom burden, and MSAS-SF subscale somatic symptom burden. The HADS was significantly correlated with the symptom clusters fatigue/anorexia/cachexia, neuropsychology, and pain. The clusters upper GI, nausea/vomiting and aerodigestive were not significantly correlated with HADS scores.

Correlations between different screening tools for depression and symptom clusters can be found in Table 3.

Table 3. Correlations of screening instruments and subscales with different symptom clusters

		Physical symptom burden										
		MSAS-SF-total	MSAS distress	MSAS psych	MSAS somatic	Cluster fatigue anorexia cachexia	Cluster neuro-psycho	Cluster debility	Cluster pain	Cluster upper GI	Cluster nausea vomiting	Cluster aero digestive
Screening instruments for depression	BDI-II	0.72** p<0.000	0.74** p<0.000	0.66** p<0.000	0.61** p<0.000	0.49** p<0.000	0.28* p=0.03	0.26* p=0.04	0.40** p=0.001	0.21 p=0.102	0.17 p=0.199	0.25 p=0.052
	BDI somatic subscale	0.75** p<0.000	0.76** p<0.000	0.63** p<0.000	0.68** p<0.000	0.55** p<0.000	0.29* p=0.26	0.34** p=0.008	0.46** p<0.000	0.25 p=0.059	0.22 p=0.088	0.30* p=0.02
	BDI affective subscale	0.45** p<0.000	0.50** p<0.000	0.48** p<0.000	0.37** p=0.004	0.40** p=0.001	0.24 p=0.058	0.19 p=0.153	0.30* p=0.019	0.19 p=0.142	0.06 p=0.627	0.07 p=0.612
	BDI cognitive subscale	0.36** p=0.004	0.33** p=0.01	0.40** p=0.003	0.25 p=0.61	0.16 p=0.208	0.18 p=0.162	0.08 p=0.524	0.16 p=0.214	0.19 p=0.15	0.09 p=0.482	0.12 p=0.34
	BDI-PC	0.60** p<0.000	0.59** p<0.000	0.54** p<0.000	0.51** p<0.000	0.48** p<0.000	0.43** p=0.001	0.34* p=0.014	0.40** p=0.003	0.36** p=0.008	0.34* p=0.014	0.19 p=0.183
	HADS-T	0.58** p<0.000	0.67** p<0.000	0.65** p<0.000	0.48** p<0.000	0.37** p=0.003	0.45** p<0.000	0.22 p=0.082	0.27* p=0.027	0.22 p=0.074	0.17 p=0.189	0.08 p=0.552
	HADS-A	0.41** p=0.001	0.52** p<0.000	0.59** p<0.000	0.31** p=0.014	0.27* p=0.028	0.50** p<0.000	0.14 p=0.256	0.18 p=0.152	0.19 p=0.132	0.13 p=0.286	- 0.02 p=0.85
	HADS-D	0.60** p<0.000	0.66** p<0.000	0.54** p<0.000	0.52** p<0.000	0.42** p=0.001	0.30* p=0.014	0.25 p=0.047	0.32* p=0.011	0.20 p=0.118	0.15 p=0.250	0.18 p=0.155

Differences in Symptom Clusters Between High- and Low-Depression Risk Patients as Defined by Scores on BDI-II, BDI-PC, and HADS

Patients who scored positive for depression on the BDI- II (cutoff 14) significantly scored higher on symptom clusters fatigue/anorexia/cachexia and pain than patients who scored negative for depression. Patients who scored positive for depression on the BDI-PC (cutoff 4) significantly scored higher on symptom clusters fatigue/anorexia/cachexia, pain, upper GI, nausea/vomiting, and debility. Patients who scored positive for depression on the HADS (cutoff 12) significantly scored higher on symptom clusters fatigue/anorexia/ cachexia and neuropsychology. Patients who scored positive for depression on the HADS subscale depression (cutoff 8) significantly scored higher on symptom clusters fatigue/anorexia/cachexia, neuropsychology, and pain.

Discussion

This study presents a sample of 65 patients with advanced cancer in which different scores and sub scores on screening instruments for depression (HADS, BDI-II, BDI-PC) correlate highly with physical symptom burden. The BDI-II and HADS-D identified a high depression risk (patients scoring above the cutoff score) in respectively 24.9% and 23.1% of the patients. This prevalence lies within the range of earlier reported prevalence based on an assessment with the BDI-II and HADS (respectively, 10 to 39% and 9 to 63%).[36-39]

In this study, the highly significant correlations between the results of screening instruments for depression and physical symptom burden in this study indicate a strong relationship, which has also been found in previous studies that demonstrate that psychological and physical symptoms are strongly related and seem to have additive effects on each other.[40-41]

The BDI-II, specifically developed to measure depression, measures physical symptom burden as well in patients with advanced cancer. Symptoms from the clusters fatigue/anorexia/cachexia, neuropsychology, debility, and pain correlate especially highly with depression scores on the BDI-II. This is not surprising, as the symptoms fatigue and anorexia are part of the diagnostic criteria for depression. The cluster neuropsychology includes symptoms such as depression and loss of concentration. Furthermore, previous studies show that debility and pain are highly correlated with depression.[15,42]

Because many physical and psychological symptoms in palliative care patients are interrelated, it can be difficult to know what we are actually measuring when using screening instruments for depression. In this study, the BDI cognitive scale differentiates best from somatic symptom burden as measured by the MSAS-SF. Forkmann et al.[43] also conclude in their study that the use of a shortened version of the BDI-II with more emphasis on the emotional and cognitive items is preferred in patients with physical illness. In the context of terminal illness, there can be many somatic and emotional issues that are not directly related to depression or depressive disorder. 'Worrying' or 'rumination' may be symptoms of depression in palliative care patients that can be better distinguished from symptoms of terminal illness. In screening questionnaires, this can probably best be measured by using items that measure the cognitive aspects of depression such as thoughts about past failures and self-criticalness. These items are well represented in the BDI cognitive subscale.

This has been a monocentric study in which a mixed cancer patient sample was studied. A relatively large number of patients with nephroblastoma and relatively few patients with lung cancer have been included. This was due to the fact that the study was conducted in an oncology center where not all departments participated. The underrepresentation of patients with lung cancer, in particular, may limit the generalizability of the findings of this study in other palliative care populations.

Unfortunately, data on the BDI-PC could not be obtained at the exact same moment as the other questionnaires so the conditions of the patients might have differed in both moments of measurements. However, it was managed to obtain all data within 2 weeks. Furthermore, the correlation between the BDI-PC and the BDI-PC items extracted from the BDI-II was very high, indicating little change in mood in this short time period.

In this study, there was a high dropout rate due to nonresponders (31%) and refusal to participate in the study (20%), which is not unusual in patients with advanced cancer in which recruitment is difficult and dropout rates are high due to deterioration of health status and death.[44]

The treating physician asked patients to participate in this study. The number of patients who the physicians considered too ill to participate was not recorded. In general, the participation of patients in research is higher, when their 'personal' treating physician invites them for participation, but it might introduce selection bias if the physician leaves out highly distressed patients. Given the relatively high scores on the BDI-II in this sample, we think severe bias is unlikely, although there appears to be a bias toward a patient group with a better survival because the number of patients who died within 3 to 6 months in the eligible patients who did not participate was higher than the group of patients who did participate in this study. Furthermore, the patient sample could be biased because patients with a high symptom burden (psychological or somatic symptom burden) and especially depressed patients might refuse participation in a study more often than patients with a low symptom burden.

This study offers a critical reflection on the use of screening instruments for depression and distress in palliative care patients. The complex relationship between physical and psychological distress can hamper active case finding for depression in palliative care. It is likely that we measure different dimensions of distress with different screening tools for depression. Especially in patients suffering from symptoms in the cluster fatigue/anorexia/cachexia, neuropsychology, debility, and pain, the somatic

symptoms are highly correlated with scores on screening tools for depression. Thus, interpreting the results of screening tools in these patients may be more challenging and a complete assessment is indispensable. The search of finding the most valid screening tool for depression in palliative care patients is complex, and in patients with different physical symptom profiles, we might need different screening tools. Therefore, we recommend direction of our attention to screening tools that, depending on the clinical context, can identify patients' needs rather than assess distress or depression.[45] Eventually, clinical relevance of screening for depression may not be the identified number of patients with depressive disorder, but the number of distressed patients who, as a result from screening, can benefit from an intervention that they would otherwise not have received.

References

1. Akechi T, Okuyama T, Sugawara Y, Nakano T, Shima Y, Uchitomi Y. Major depression, adjustment disorders, and post-traumatic stress disorder in terminally ill cancer patients: associated and predictive factors. J Clin Oncol. 2004;22:1957– 1965.
2. Hotopf M, Chidgey J, Addington-Hall J, Ly KL. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. Palliat Med. 2002;16:81–97.
3. Mitchell AJ, Chan M, Bhatti H, et al. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. Lancet Oncol. 2011;12:160–174.
4. Chochinov HM, Kristjanson LJ, Hack TF, Hassard T, McClement S, Harlos M. Burden to others and the terminally ill. J Pain Symptom Manage. 2007;34:463–471.
5. Henoch I, Bergman B, Gustafsson M, Gaston-Johans- son F, Danielson E. The impact of symptoms, coping capacity, and social support on quality of life experience over time in patients with lung cancer. J Pain Symptom Manage. 2007;34:370–379.

6. Irving G, Lloyd-Williams M. Depression in advanced cancer. Eur J Oncol Nurs. 2010;14:395–399.

7. Lloyd-Williams M, Reeve J, Kissane D. Distress in palliative care patients: developing patient-centred approaches to clinical management. Eur J Cancer. 2008;44:1133–1138.

8. Rayner L, Loge JH, Wasteson E, Higginson IJ. The detection of depression in palliative care. Curr Opin Support Palliat Care. 2009;3:55–60.

9. Reeve JL, Lloyd-Williams M, Dowrick C. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. Palliat Med. 2008;22:383–391.

10. Anderson WG, Alexander SC, Rodriguez KL, et al. "What concerns me is..." Expression of emotion by advanced cancer patients during outpatient visits. Support Care Cancer. 2008;16:803–811.

11. Newell S, Sanson-Fisher RW, Girgis A, Bonaventura A. How well do medical oncologists' perceptions reflect their patients' reported physical and psychosocial problems? Data from a survey of five oncologists. Cancer. 1998;83:1640– 1651.

12. Stiefel R, Die TM, Berney A, Olarte JM, Razavi A. Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. Support Care Cancer. 2001;9:477–488.

13. Kelly B, McClement S, Chochinov HM. Measurement of psychological distress in palliative care. Palliat Med. 2006;20:779–789.

14. Wasteson E, Brenne E, Higginson IJ, et al. Depression assessment and classification in palliative cancer patients: a systematic literature review. Palliat Med. 2009;23:739–753.

15. Gado-Guay M, Parsons HA, Li Z, Palmer JL, Bruera E. Symptom distress in advanced cancer patients with anxiety and depression in the palliative care setting. Support Care Cancer. 2009;17:573–579.

16. Vodermaier A, Linden W, Siu C. Screening for emotional distress in cancer patients: a systematic review of assessment instruments. J Natl Cancer Inst. 2009;101:1464–1488.

17. Pallialine Richtlijnen Palliatieve Zorg: Richtlijn De- pressie. 2010. Internet Communication.

18. Beck AT, Steer RA, Brown GK. Manual for the Beck Depression Inventory-II. 1996. Report.

19. Arnau RC, Meagher MW, Norris MP, Bramson R. Psychometric evaluation of the Beck Depression Inventory-II with primary care medical patients. Health Psychol. 2001;20:112–119.

20. Huffman JC, Smith FA, Blais MA, Beiser ME, Januzzi JL, Fricchione GL. Rapid screening for major depression in post- myocardial infarction patients: an investigation using Beck Depression Inventory II items. Heart. 2006;92:1656–1660.

21. Poole H, Bramwell R, Murphy P. Factor Structure of the Beck Depression Inventory-II in patients With chronic pain. Clin J Pain. 2006;22:790–798.

22. Richter P, Werner J, Heerlein A, Kraus A, Sauer H. On the validity of the Beck Depression Inventory. A review. Psychopathology. 1998;31:160–168.

23. Berard RM, Boermeester F, Viljoen G. Depressive disorders in an out-patient oncology setting: prevalence, assess- ment, and management. Psychooncology. 1998;7:112–120.

24. Steer RA, Ball R, Ranieri WF, Beck AT. Dimensions of the Beck Depression Inventory-II in clinically depressed outpatients. J Clin Psychol. 1999;55:117–128.

25. Beck AT, Guth D, Steer RA, Ball R. Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care. Behav Res Ther. 1997;35:785–791.

26. Furlanetto LM, Mendlowicz MV, Romildo BJ. The validity of the Beck Depression Inventory-Short Form as a screening and diagnostic instrument for moderate and severe depression in medical inpatients. J Affect Disord. 2005;86:87– 91.

27. Golden J, Conroy RM, O'Dwyer AM. Reliability and validity of the Hospital Anxiety and Depression Scale and the Beck Depression Inventory (Full and FastScreen scales) in detecting depression in persons with hepatitis C. J Affect Disord. 2007;100:265–269.

28. Bjelland I, Dahl AA, Haug TT, Neckelmann D. The validity of the Hospital Anxiety and Depression Scale. An updated literature review. J Psychosom Res. 2002;52:69–77.

29. Mykletun A, Stordal E, Dahl AA. Hospital Anxiety and Depression (HAD) scale: factor structure, item analyses and internal consistency in a large population. Br J Psychiatry. 2001;179:540–544.

30. Mitchell AJ, Meader N, Symonds P. Diagnostic validity of the Hospital Anxiety and Depression Scale (HADS) in cancer and palliative settings: a meta-analysis. J Affect Disord. 2010;126:335–348.

31. Vodermaier A, Millman RD. Accuracy of the Hospital Anxiety and Depression Scale as a screening tool in cancer patients: a systematic review and meta-analysis. Support Care Cancer. 2011;19:1899–1908.

32. Tranmer JE, Heyland D, Dudgeon D, Groll D, Squires- Graham M, Coulson K. Measuring the symptom experience of seriously ill cancer and noncancer hospitalized patients near the end of life with the Memorial Symptom Assessment Scale. J Pain Symptom Manage. 2003;25:420–429.

33. Chang VT, Hwang SS, Feuerman M, Kasimis BS, Thaler HT. The Memorial Symptom Assessment Scale Short Form (MSAS-SF). Cancer. 2000;89:1162–1171.

34. Chang VT, Hwang SS, Kasimis B, Thaler HT. Shorter symptom assessment instruments: the Condensed Memorial Symptom Assessment Scale (CMSAS). Cancer Invest. 2004;22:526–536.

35. Kirkova J, Aktas A, Walsh D, Rybicki L, Davis MP. Consistency of symptom clusters in advanced cancer. Am J Hosp Palliat Care. 2010;27:342–346.

36. Jefford M, Mileshkin L, Richards K, et al. Rapid screening for depression–validation of the Brief Case-Find for Depression (BCD) in medical oncology and palliative care patients. Br J Cancer. 2004;91:900–906.

37. Lloyd-Williams M, Friedman T, Rudd N. An analysis of the validity of the Hospital Anxiety and Depression scale as a screening tool in patients with advanced metastatic cancer. J Pain Symptom Manage. 2001;22:990–996.

38. Moorey S, Greer S, Watson M, et al. The factor structure and factor stability of the hospital anxiety and depression scale in patients with cancer. Br J Psychiatry. 1991;158:255–259.

39. Mystakidou K, Tsilika E, Parpa E, Smyrniotis V, Galanos A, Vlahos L. Beck Depression Inventory: exploring its psychometric properties in a palliative care population of advanced cancer patients. Eur J Cancer Care (Engl). 2007;16: 244–250.

40. Kroenke K, Theobald D, Wu J, Loza JK, Carpenter JS, Tu W. The association of depression and pain with health- related quality of life, disability, and health care use in cancer patients. J Pain Symptom Manage. 2010;40:327–341.

41. Tsai JS, Wu CH, Chiu TY, Chen CY. Significance of symptom clustering in palliative care of advanced cancer patients. J Pain Symptom Manage. 2010;39:655–662.

42. Laird BJ, Boyd AC, Colvin LA, Fallon MT. Are cancer pain and depression interdependent? A systematic review. Psychooncology. 2009;18:459–464.

43. Forkmann T, Vehren T, Boecker M, Norra C, Wirtz M, Gauggel S. Sensitivity and specificity of the Beck Depres- sion Inventory in cardiologic inpatients: how useful is the conventional cut-off score? J Psychosom Res. 2009;67:347– 352.

44. Le Fevre P, Devereux J, Smith S, Lawrie SM, Cornbleet M. Screening for psychiatric illness in the palliative care inpatient setting: a comparison between the Hospital Anxiety and Depression Scale and the General Health Questionnaire- 12. Palliat Med. 1999;13:399–407.

45. van Scheppingen C, Schroevers MJ, Smink A, et al. Does screening for distress efficiently uncover meetable unmet needs in cancer patients? Psychooncology. 2011;20:655–663.

"As no two persons are alike in health, so no two are alike in disease; and no diagnosis is complete or exact which does not include an estimate of the character or constitution of the patient…. For to treat a sick man rightly requires diagnosis not only of the disease but the manner and degrees in which its supposed essential characters are modified by his personal qualities, by the inheritances that converge in him, by the changes wrought in him by the conditions of his past life, and many things besides."

James Paget (1814-1899)

Chapter 6

‘Life is still worth living’: a pilot exploration of self-reported resources of palliative care patients while facing a terminal illness

Submitted

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Abstract

Background: Facing a terminal illness can be highly stressful and palliative care patients frequently suffer from mood symptoms. The focus of health care is often on treating symptoms whereas health-promoting factors receive less attention.

Objective: The aim of this study was to explore the views of palliative care patients on resources and ways of coping that help them prevent or manage mood symptoms.

Methods: A pilot qualitative study was performed through face-to-face semi-structured interviews with fifteen ambulant patients with advanced cancer. The interviews were transcribed verbatim and qualitative analysis was independently performed by two researchers, according to the principle of constant comparative analysis.

Results: Patients reported on attitudes and specific coping strategies that they found helpful, as well as aspects of their life narrative and spirituality. Resources were found in meaningful contacts with family and friends and in personal attention of professional medical caregivers for their wellbeing.

Conclusion: We conclude that when palliative care patients experience mood symptoms, they could identify resources to cope with these symptoms in the context of their unique life.

Implications for practice: If patients are given an active role in the care team in addressing, activating and enhancing personal resources their autonomy could be enhanced.

Introduction

Living with a terminal illness is a highly stressful situation, causing substantial impact on the way patients relate to their social network and their way of living (Thoresen et al., 2011). Patients in palliative care frequently report a variety of physical and psychological symptoms (Osse et al., 2005) including depressive symptoms, which may be part of a depressive disorder. The prevalence of depressive disorders in the palliative trajectory varies widely from 3 to 77% (Hotopf et al., 2002; Stiefel et al., 2001) due to differences in definition, classification and methods of assessment. A depressive disorder is mostly considered as a psychiatric illness for which interventions such as psychotherapy or medication are available (Akechi et al., 2008). Depressive disorders in patients in palliative care are associated with poor outcomes in the palliation of physical symptoms, treatment adherence, prognosis, and result in increased disability, inpatient episodes and healthcare cost (Irving and Lloyd-Williams, 2010; Lloyd-Williams et al., 2008; Lloyd-Williams et al., 2009; Rayner et al., 2011; Reeve et al., 2008). Therefore depressive disorders cause a burden for both patients and caregivers (Chochinov et al., 2007; Henoch et al., 2007).

Some, however, consider a depressive disorder as a normal reaction to 'something bad happening' (Dowrick, 2004). In this latter view, the absence of a depressive disorder, or even reports of positive mood or emotions, in the context of a terminal illness are perhaps more surprising than the presence of a depressive disorder. Positive emotions may broaden an individual's repertoire in reaction to adverse events and reinforce an individual's personal resources (Fredrickson, 2001). A recent study confirmed this theory and suggested that upward spirals of positive emotions can counter downward spirals of negativity (Garland et al., 2010). Antonovsky emphasized origins of health in a model that identifies three foundations for successful coping: comprehensibility, manageability and meaningfulness (Antonovsky and Sagy, 1986). Whereas our healthcare system emphasizes the treatment of diseases and symptoms, a growing field of research is reflecting on ways to enhance health-promoting factors,

inferring that these are also important in preventing disorders (Lindstrom and Eriksson, 2005).

The aim of palliative care is to improve the quality of life of the individual patient by proactive identification of problems and delivering patient-centered multidimensional care (Lloyd-Williams et al., 2008). It has been shown that adequate coping strategies can positively influence mood in palliative care patients (van Laarhoven et al., 2010), but little attention has thus far been given to palliative care patients' actual experience of effective ways of coping and resources. This hampers the possibility to build palliative care upon self-empowerment. Preventive, context-related interventions such as those derived from positive psychology (Seligman et al., 2005), can empower patients in a palliative care trajectory to rely on personal resources and ways of coping when facing terminal illness.

This exploratory study analyses the views of patients in a palliative trajectory on resources and ways of coping that help them prevent or manage mood symptoms in facing terminal illness and end of life decisions.

Methods

A qualitative study was performed through face-to-face semi-structured interviews with patients with advanced cancer in a palliative care trajectory with a life expectancy (estimated by their physician) between two months and one year.

This study was part of a larger study in which 65 palliative care patients were included in a diagnostic study on depressive disorder (Warmenhoven et al., 2012b). Patients who were unable to speak Dutch or who suffered from cognitive dysfunction were excluded from this study. Part of the diagnostic study consisted of a face-to-face psychiatric interview (Schedules for Clinical Assessment in Neuropsychiatry 2.1) to assess a possible depressive disorder. After the structured psychiatric interview, patients

were asked the following open question: 'What helps you to prevent or address mood symptoms in the context of your terminal illness?'. The conversations following this question were recorded on audiotape. The interviews took place from December 2008 until November 2009. The current qualitative study reports about individual interviews with palliative care patients. For this pilot study fifteen palliative care patients were selected using purposive sampling based on age and sex. Furthermore we selected about half of the patients who had a Beck Depression Inventory (BDI-II) depression score above a cut-off score of 16, and the rest of the patients with scores below the cut-off score (Warmenhoven et al., 2012a).

The interviews were transcribed verbatim and qualitative analysis of data has been independently performed according to the principle of constant comparative analysis (Cutcliffe, 2005; Strauss, 1987) by the interviewer and a second researcher. Both researchers coded the transcripts thematically and categorized relevant and meaningful fragments with the aim of creating structure in relevant themes. This process was carried out using ATLAS.ti 4.2, a software program for qualitative data analysis. After analyzing seven interviews, the emerging codes and themes were discussed until consensus was reached. The following eight interviews were analyzed using the codes and themes that had emerged from the first seven interviews; codes or themes were added when needed. During the qualitative analysis, themes were continuously checked against the transcripts to ground the themes in the data.

Results

Eight women and seven men participated in this study. Patients had a mean age of 65 years with a range of 51-89 years. On inclusion patients had a mean score on the BDI of 15.9, with a range from 5-35 (table 1). None of the patients were suffering from a depressive disorder or anxiety disorder as assessed with the diagnostic interview. Three men and four women reported a history of depression. The median time that had passed since

receiving the bad news of having an incurable illness was 22 months, with a range from 1-115 months.

Table 1. Patient characteristics

	Men	Women	Total
N	7	8	15
Age (mean and range)	66 (range 51-89)	65 (range 52-75)	65 (range 51-89)
BDI (mean and range)	15.3 (range 6-35)	16.5 (range 5-26)	15.9 (range 5-35)
Self-reported history of depression (N=)	3	4	7
Months since receiving diagnosis of incurable illness (median and range)	27 (range 2-114)	9 (range 1-115)	22 (range 1-115)

Patients named resources or ways of coping that they experienced as helpful in preventing or addressing mood symptoms. In the answers to the question 'What helps you to prevent or address mood symptoms in facing your terminal illness?', we could distinguish resources and ways of coping that were directly related to the patient, resources that were related to the patient's social network and resources that were related to professional support.

Patient's resources

Patients reported about how their life narrative helped them to face their terminal illness. They reported experiences and memories from the past that helped them in the situation that they currently faced. Furthermore patients reported that it was helpful that they could look back at their life with satisfaction and without the sense of leaving unfinished business behind.

P. 4: '…for a while, after I did not have to work anymore, I have been helping out as a volunteer in supporting disabled persons on their holiday. And then you actually learn a lot…..that there are other people and things can be different…….'

P. 11: 'I always loved to go to work. Very much so. I have always worked very hard. I did not make weeks of forty hours, but I [started] in the morning at three - four am and I returned home at ten pm. On Friday at five am and Saturday afternoon home at three pm. Then I did not see my bed at all, at the bakery. It was always very nice work.'

P. 12: 'I have had a very nice life. So, for me….well of course there are always things of which you could say: I would have liked it better this way or that way……but I have had a very nice life and…..a good marriage….not without any fight, I mean, there were also…..sometimes there were problems, but that was never paramount…'

P. 12: 'Well, I have the idea, but again, you never know, that there are no unfinished things….I do not have to think: this needs to be…..with this person I need to reconcile……so yes, things are ok….I am at peace.'

P. 1: 'Although I have been raised protestant, I developed my own opinions about this, about life. Including dying. I have developed this and yes, that's what I build on.'

Patients reported different helpful behaviors or attitudes to address mood symptoms. They reported that they used ways of dealing with difficulties that had been proven effective in their past experiences. Attitudes that were experienced as helpful were optimism, being able to experience and enjoy the moment, being grateful for the moment, being able to take decisions, taking an active stance in life, a fighting spirit in combination with meekness to the inevitable, humor and being able to reflect on their own feelings and behaviors. Spirituality was experienced in religious rituals by some patients and in non-religious experiences (e.g. nature or connectedness with other people) by others. Active awareness of spirituality helped patients to feel

connected with something larger. They felt they could surrender to something higher and sometimes participated in supporting rituals. Specific coping strategies like active problem solving, living with their limitations in a flexible way, distracting themselves, taking good care of themselves, undertaking various (physical) activities and living life as normal as possible were identified as helpful.

P.1 :'I am, yes, every human being is religious, you could say, but…..my view on life is just…..you come at a certain moment and you don't choose this yourself. And you go at a certain moment and you don't choose that either.'

P. 8: 'I love to enjoy nature and those kinds of things. …..We [patient and partner] did a bird course together for example. Our children thought it was deeply insane [laughs], but we think it's incredibly fun and if we see a woodpecker when we take a walk, then we are completely happy [laughs]. Yes, that is what spirituality means to us.'

P. 15: 'I pray twice a day. For all the people that have died.'

P. 4: 'I don't give in. I, yes, actually, I still try to do everything. ……normally [this activity] takes ten minutes. Well, it takes me one hour. …..And I could say that it used to take me only a little while, and now every time it takes me longer than back then. But I am happy and thrilled that I can still do it, that I am still able…..'

P. 4: 'Everything I can do, that I can still enjoy, I do.'

P. 8: 'So it is not only negative. I don't see it that way. There are, of course, many negative things about it, but yes, life is still very much worth living.'

P. 14: 'It is a surrender. To life, or destiny. I don't have to fulfill that anymore'

Social network

Patients with a partner experienced the care of their partner as essential. A sense of connectedness with a larger community (family, church, village) was reported to be helpful. Some patients reported that communication with other people was very supporting. They actively looked for meaningful contacts and interactions. Explicitly being of significance to other people was reported to be important.

P. 9: 'That's the most important thing in life, isn't it, that I am still useful for people and that the people that live around me are still useful to me'

P. 15: 'I have a daughter who came to the radiation therapy 32 times. All these days….. That's positive….I am very happy about that'

P. 14: 'If it becomes too much for me, I look for someone to talk with, for a while. So I can….that is…how shall I say this…in my own environment I cannot share much with people, except for my friends and daughter. So then…. I used to go to a course and there I would always find my kind of people. And now I have found someone to talk to through an organization of volunteers…… he used to be a priest. He is married and very involved in Buddhism. Yes, then you can speak with each other for a while and that brings something different…….yes, for example we exchange books, and then we talk about it.'

Professional support

Patients valued a genuine interest of their professional caregivers in their wellbeing. Some reported that professional psychological care had been helpful. Patients also reported that it would be helpful if medical caregivers, like physicians and nurses, would more frequently ask about their wellbeing.

P. 9: 'I went to Mrs. A [a psychologist], because I had difficulty communicating with my daughter because we have such conflicting opinions and I thought: we must not let this happen. So let's find help.'

P. 11: '….the doctor will probably walk in this evening, he always comes walking in and out, once a week. …….we drink coffee and we talk for a while…..that is really great.'

P. 9: 'It would be nice if something was offered. And maybe not specifically, but if they would, for example, if the specialist checks my breathing, checks whether my abdomen hurts etc., she could also ask if I am still feeling happy. Or if I am, I don't know, crying more, or something like that……because that is not what she is asking. It would be nice if that was asked, because then you at least have an opportunity to talk about it. It could well be that there is no-one at home talking with you about it.'

Discussion and conclusion

Discussion

This study reports self-reported resources and ways of coping that help patients to prevent or manage mood symptoms in facing terminal illness using qualitative research methods. Patients reported about attitudes and specific coping strategies that they found helpful, as well as aspects of their life narrative and spirituality. Furthermore resources were found in meaningful contacts with family and friends and in personal attention of professional medical caregivers for their wellbeing.

Some of the self-reported resources that were identified in this study have been studied previously. Both an accepting stance towards the situation as well as an active attitude, as reported by patients in this study, have been found by Laarhoven et al. as being predictive for a better quality of life and lower levels of depression and hopelessness (van Laarhoven et al., 2010). A recent review concluded that active, problem-focused coping in advanced cancer patients seems adaptive (O'Brien and Moorey, 2010) which may be related to the 'active stance towards life' that patients in this study identify as being helpful. This quality of an 'active stance towards life' may also be

related to the findings in a recent study in cancer patients in which goal reengagement, active coping and acceptance were reported to be significantly related to positive change (Schroevers et al., 2011). In previous studies, practicing and experiencing religious rituals or spirituality seemed to be beneficial for quality of life in the context of palliative care (Sinclair et al., 2006; Vallurupalli et al., 2012). Earlier studies on social resources showed that a lack of social support was a predictor of non-remission for depression (Goodwin et al., 2011).

Every palliative care patient experiences his symptoms or moods in the context of his unique life and therefore seems the most relevant person to identify personal resources. Previous research shows that physicians can help patients with medical problems to identify and mobilize self-assessed personal health resources (Hollnagel et al., 2000; Malterud and Hollnagel, 1997, 2004). Considering this, palliative care patients could be given an active role in the care team in addressing, activating and enhancing personal resources to address mood symptoms. This could enhance their autonomy in creating or enhancing upward spirals of emotions and experience positive affect, which may be much more effective to counter the downward spiral of emotions that seem inevitable in the palliative care context (Fredrickson, 2001).

In this study a differentiated sample of patients was used, including men and women in a palliative trajectory, varying in age, depression score on the BDI-II, history of depression and time since the diagnosis of an incurable illness. Each researcher performed the analysis independently. No cyclic analysis procedure was used, however, which makes it possible that themes were missed. A further limitation of this study is that it is not clear whether patients verbally identifying resources can also use and enhance these resources and whether the personal resources are effective in alleviating mood symptoms.

Conclusion

In this study palliative care patients seem to welcome active exploration of their mood by healthcare professionals and can identify their personal resources to prevent or address mood symptoms. Although negative aspects of mood, such as symptoms and behavior of sadness or grief, are expected in a palliative care context, the findings of this study encourage also attending to positive experiences and behavior of patients in a palliative care setting. Palliative care patients can be encouraged to identify personal resources that are accessible and available in their specific context. The search for positive resources could offer a more inclusive and realistic view of the palliative care context in which both negative and positive aspects are attended to. In helping patients to identify their personal resources, patient autonomy in enhancing resilience could be increased. In this process it is essential that healthcare professionals invite patients as partners in the communal process of providing palliative care. Further research in this field is necessary to clarify the effectiveness of actively involving patients in identifying and strengthening personal resources. In addition, more research on specific interventions that can possibly support this process in the end of life phase, such as dignity therapy (Chochinov et al., 2011), narrative therapy (Stanley and Hurst, 2011) and other psychological interventions, is needed.

References

Akechi, T., Okuyama, T., Onishi, J., Morita, T., Furukawa, T.A., 2008. Psychotherapy for depression among incurable cancer patients. Cochrane database of systematic reviews (Online), CD005537.

Antonovsky, H., Sagy, S., 1986. The development of a sense of coherence and its impact on responses to stress situations. The Journal of social psychology 126, 213-225.

Chochinov, H.M., Kristjanson, L.J., Breitbart, W., McClement, S., Hack, T.F., Hassard, T., Harlos, M., 2011. Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomised controlled trial. The lancet oncology 12, 753-762.

Chochinov, H.M., Kristjanson, L.J., Hack, T.F., Hassard, T., McClement, S., Harlos, M., 2007. Burden to others and the terminally ill. J Pain Symptom Manage 34, 463-471.

Cutcliffe, J.R., 2005. Adapt or adopt: developing and transgressing the methodological boundaries of grounded theory. Journal of advanced nursing 51, 421-428.

Dowrick, C., 2004. Beyond Depression: A new approach to understanding and management

Fredrickson, B.L., 2001. The role of positive emotions in positive psychology. The broaden-and-build theory of positive emotions. Am Psychol 56, 218-226.

Garland, E.L., Fredrickson, B., Kring, A.M., Johnson, D.P., Meyer, P.S., Penn, D.L., 2010. Upward spirals of positive emotions counter downward spirals of negativity: insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. Clin Psychol Rev 30, 849-864.

Goodwin, L., Lee, W., Price, A., Rayner, L., Monroe, B., Sykes, N., Hansford, P., Higginson, I.J., Hotopf, M., 2011. Predictors of non-remission of depression in a palliative care population. Palliat Med.

Henoch, I., Bergman, B., Gustafsson, M., Gaston-Johansson, F., Danielson, E., 2007. The impact of symptoms, coping capacity, and social support on quality of life experience over time in patients with lung cancer. J Pain Symptom Manage 34, 370-379.

Hollnagel, H., Malterud, K., Witt, K., 2000. Men's self-assessed personal health resources: approaching patients' strong points in general practice. Family practice 17, 529-534.

Hotopf, M., Chidgey, J., ddington-Hall, J., Ly, K.L., 2002. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. Palliative medicine 16, 81-97.

Irving, G., Lloyd-Williams, M., 2010. Depression in advanced cancer. European journal of oncology nursing : the official journal of European Oncology Nursing Society 14, 395-399.

Lindstrom, B., Eriksson, M., 2005. Salutogenesis. Journal of epidemiology and community health 59, 440-442.

Lloyd-Williams, M., Reeve, J., Kissane, D., 2008. Distress in palliative care patients: Developing patient-centred approaches to clinical management. European journal of cancer (Oxford, England : 1990).

Lloyd-Williams, M., Shiels, C., Taylor, F., Dennis, M., 2009. Depression--an independent predictor of early death in patients with advanced cancer. Journal of affective disorders 113, 127-132.

Malterud, K., Hollnagel, H., 1997. Women's self-assessed personal health resources. Scandinavian journal of primary health care 15, 163-168.

Malterud, K., Hollnagel, H., 2004. Positive self-assessed general health in patients with medical problems. A qualitative study from general practice. Scandinavian journal of primary health care 22, 11-15.

O'Brien, C.W., Moorey, S., 2010. Outlook and adaptation in advanced cancer: a systematic review. Psycho-oncology 19, 1239-1249.

Osse, B.H., Vernooij-Dassen, M.J., Schade, E., Grol, R.P., 2005. The problems experienced by patients with cancer and their needs for palliative care. Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer 13, 722-732.

Rayner, L., Price, A., Hotopf, M., Higginson, I.J., 2011. The development of evidence-based European guidelines on the management of depression in palliative cancer care. European journal of cancer (Oxford, England : 1990) 47, 702-712.

Reeve, J.L., Lloyd-Williams, M., Dowrick, C., 2008. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. Palliative medicine 22, 383-391.

Schroevers, M.J., Kraaij, V., Garnefski, N., 2011. Cancer patients' experience of positive and negative changes due to the illness: relationships with psychological well-being, coping, and goal reengagement. Psycho-oncology 20, 165-172.

Seligman, M.E., Steen, T.A., Park, N., Peterson, C., 2005. Positive psychology progress: empirical validation of interventions. Am Psychol 60, 410-421.

Sinclair, S., Pereira, J., Raffin, S., 2006. A thematic review of the spirituality literature within palliative care. Journal of palliative medicine 9, 464-479.

Stanley, P., Hurst, M., 2011. Narrative palliative care: a method for building empathy. Journal of social work in end-of-life & palliative care 7, 39-55.

Stiefel, R., Die, T.M., Berney, A., Olarte, J.M., Razavi, A., 2001. Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer 9, 477-488.

Strauss, A.L., 1987. Qualitative analysis for social scientists.

Thoresen, L., Wyller, T., Heggen, K., 2011. The significance of lifeworld and the case of hospice. Med Health Care Philos 14, 257-263.

Vallurupalli, M., Lauderdale, K., Balboni, M.J., Phelps, A.C., Block, S.D., Ng, A.K., Kachnic, L.A., Vanderweele, T.J., Balboni, T.A., 2012. The role of spirituality and religious coping in the quality of life of patients with advanced cancer receiving palliative radiation therapy. The journal of supportive oncology 10, 81-87.

van Laarhoven, H.W., Schilderman, J., Bleijenberg, G., Donders, R., Vissers, K.C., Verhagen, C.A., Prins, J.B., 2010. Coping, Quality of Life, Depression, and Hopelessness in Cancer Patients in a Curative and Palliative, End-of-Life Care Setting. Cancer Nurs.

Warmenhoven, F., van Rijswijk, E., Engels, Y., Kan, C., Prins, J., van Weel, C., Vissers, K., 2012a. The Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depressive disorder in Dutch advanced cancer patients. Support Care Cancer 20, 319-324.

Warmenhoven, F., van Rijswijk, E., van Weel, C., Prins, J., Vissers, K., 2012b. Low prevalence of depressive disorder in ambulatory advanced cancer patients using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN 2.1). Journal of affective disorders 136, 1209-1211.

"A physician is obligated to consider more than a diseased organ, more even than the whole man - he must view the man in his world."

Harvey William Cushing (1869 – 1939)

Chapter 7

How Family Physicians Address Diagnosis and Management of Depression in Palliative Care Patients

Published: Ann Fam Med. 2012 Jul;10(4):330-6

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Abstract

Purpose: Depression is highly prevalent in palliative care patients. In clinical practice, there is concern about both insufficient and excessive diagnosis and treatment of depression. In the Netherlands, family physicians have a central role in delivering palliative care. We explored variation in family physicians' opinions regarding the recognition, diagnosis, and management of depression in palliative care patients.

Methods: We conducted a focus group study in a sample of family physicians with varied practice locations and varying expertise in palliative care. Transcripts were analyzed independently by 2 researchers using constant comparative analysis in ATLAS.ti.

Results: In 4 focus group discussions with 22 family physicians, the physicians described the diagnostic and therapeutic process for depression in palliative care patients as a continuous and overlapping process. Differentiating between normal and abnormal sadness was viewed as challenging. The physicians did not strictly apply criteria of depressive disorder but rather relied on their clinical judgment and strongly considered patients' context and background factors. They indicated that managing depression in palliative care patients is mainly supportive and nonspecific. Antidepressant drugs were seldom prescribed. The physicians described difficulties in diagnosing and treating depression in palliative care, and gave suggestions to improve management of depression in palliative care patients in primary care.

Conclusions: Family physicians perceive the diagnosis and management of depression in palliative care patients as challenging. They rely on open communication and a long-standing physician-patient relationship in which the patient's context is of great importance. This approach fits with the patient-centered care that is promoted in primary care.

Introduction

Mood disturbances are common in palliative care patients. When confronted with a patient on a palliative trajectory who reports feeling sad, it can be challenging to differentiate depression from normal sadness. The prevalence of major depression and adjustment disorder in patients with advanced cancer is 6.7% and 16.3%, respectively.[1] Depression in palliative care is associated with poor treatment adherence, increased difficulties in relieving physical symptoms, disability, poor prognosis, higher mortality, longer inpatient stays, and elevated health care costs.[2-6]

Consequently, recognition, diagnosis, and treatment of depression are important. Health care professionals face the dilemma that active screening for and treatment of mood symptoms are encouraged, but may lead to overtreatment and medicalization of normal sadness.[7-9] In palliative care, this dilemma may be accentuated because mood symptoms can be related to the stress of facing terminal illness.

Palliative care is integral health care in which, in most countries, family physicians play an important role.[10,11] Family physicians find it difficult to achieve balance between supporting and empowering patients with depressive symptoms, and actively treating patients with a depressive disorder.[9,12,13] This difficulty could be even more prominent in palliative care, where physical symptoms and grief may hamper the interpretation of mood symptoms.[5, 14-16]

The aim of this study was to explore the variation in the opinions of family physicians regarding the recognition, diagnosis, and management of depression in palliative care patients, and to ascertain their suggestions for optimizing this process.

Methods

Design and Setting

The study took place in Dutch primary care. In the Netherlands, everyone is obliged to have private health care insurance, with all insurance plans providing care through family practice. Most palliative care patients want to die at home, with their family physician as the main professional caregiver.[17]

To study the perception of family physicians with regard to depression in palliative care patients, we used focus group discussions. A focus group study is considered an appropriate method to explore existing opinions about complex issues.[18]

Participants

We used purposive sampling to obtain a sample of family physicians from different locations and with varying expertise in palliative care. The sample consisted of 4 groups: (1) an existing continuing medical education group of physicians, discussing topics on a monthly basis; (2) a group of physicians whose practices were affiliated with the Radboud University for graduate studies in medicine; (3) a group of physicians of affiliated practices who had extensive expertise in palliative care; and (4) a group of physicians who were not affiliated with a university and whose practices were located in the South of the Netherlands. Group 1 had 8 physicians. The members of groups 2 and 3 were recruited by sending invitations to 300 family physicians; 61 physicians responded, of whom 8 were willing and able to participate in these groups. We selected the physicians with expertise in palliative care on the basis of participation in education, work, or research in this field. Finally, of 24 physicians invited, 6 physicians were willing and able to participate in group 4. All physicians were paid a modest fee for their participation.

Questionnaire

Each focus group participant answered a questionnaire on demographics, work experience, type of practice, religion, attitudes toward the use of screening instruments to diagnose depression, and the average number of palliative care patients they supported in 1 year. Additionally, using a 10-cm visual analog scale, participants were asked to indicate their expertise in palliative care and in mental health; higher scores indicated greater expertise.

Focus Groups

An experienced, independent moderator (K.vS.) guided the focus group discussions with the topic list shown in Table 1. The topic list was developed from the literature and guidelines on depression in general and in palliative care.[19-22] It focused on attitudes, problems, and needs in the management of depression in palliative care.

Table 1. Topic List Focus Group 'Depression in palliative care patients'

Identification of depression in palliative patients: • How do you recognize depression in a palliative patient? • Which specific complaints trigger you to think of depression? • What role do informal caregivers play in the assessment of depression? • How often do you recognize depression in a palliative patient? • Do you recognize or diagnose depression more easily in your palliative care patients after gaining more knowledge and experience in palliative care due to education and training? • How would you describe the process of diagnosing depression in a palliative patient? • Do you use guidelines or standards in diagnosing depression in a palliative patient? • What difficulties do you experience in diagnosing depression in a palliative patient? • Have you experienced that you missed a diagnosis of depression in a palliative patient or have recognized it (too) late?
Management of depressive symptoms in palliative patients: • What is your general management for depression in palliative care patients? • What is your specific management for depression in palliative care patients? • Did your approach of depression in palliative care patients change after gaining more knowledge and experience in palliative care? • How do you perceive your role as a doctor in managing depression in palliative care patients? • How are partners, spouses and other close relatives of a palliative care patient involved in managing depression in palliative care patients?
Needs and solutions • What is needed in primary care to improve the identification and management of depressive complaints in the palliative phase?

At the start of the focus group discussion, we gave a definition of a palliative care patient, describing someone having a progressive, incurable illness, with a life expectancy of less than 1 year but more than a few weeks. We used this definition to direct the discussion to the care of patients on a palliative trajectory but not yet in the terminal phase of their illness.

We did not predefine depression because we wanted to observe physicians' implicit and explicit opinions on its definition. After briefly describing the group procedure, the moderator introduced each topic on the list, and each participant was invited to give his or her view. This step was followed by a group discussion in which the moderator actively motivated participants to explore and clarify their views more in depth. All focus group discussions were recorded and transcribed verbatim.

Data Analysis

We used constant comparative analysis to analyze the data.[23,24] During this process, themes were continuously checked against the transcripts to ground the themes in the data using ATLAS.ti 4.2 (ATLAS.ti Scientific Software Development GmbH).

The analysis started immediately after the first focus group and continued after each subsequent group. Two researchers (F.W. and E.vH.) independently coded the transcripts and categorized meaningful fragments to create structure in relevant themes. After each group, the codes were compared and discussed until agreement was reached. Subsequently, the codes were discussed with a third experienced researcher (E.vR.), to enhance rigor. We added important new themes to the topic list for consecutive focus groups until saturation was reached.[18,25]

Results

Participants and Procedure

Our purposive sampling resulted in 4 focus groups having a total of 22 family physicians (13 men, 9 women; 4 to 8 participants per group). The physicians' characteristics are given in Table 2. The focus group sessions lasted approximately 90 minutes and took place between February and April of 2010.

Table 2. Characteristics of family physicians

General characteristics	**Number of family physicians**	
Male	13	
Female	9	
Full time*	12	
Part time	10	
Urbanization of practice		
Rural	6	
Suburban	9	
Urban	6	
Experience and expertise	**Mean**	**Range**
Experience as a family physician	18	(3-33)
Number of patients in their practice	4575	(1850-7300)
Estimated number of palliative patients per year	11.5	(3-20)
VAS score expertise palliative care	6,7	(3,4 – 8,4)
VAS score expertise mental health care	6,4	(2,9 – 7,9)

*Full time: 80% -100% full time

The results of the focus groups are split into 4 main categories: diagnosis of depression, management of depression, difficulties in this area, and needs and possible solutions. Below, we present different themes within each category.

Diagnosis of Depression

Depression Terminology, and Normal vs Pathologic Sadness

The family physicians reported that they regularly noticed a depressed mood, anxiety, sadness, and worry in palliative care patients, and generally felt competent to address these symptoms. They qualified emotional issues as understandable and appropriate in the process of accepting the end of life, and although they actively addressed these issues, they did not apply the medical concept of depression. They described difficulty in distinguishing normal from abnormal sadness, as the following comment illustrates:

I don't see it [depression] very often and I notice I have the tendency to ignore the medical concept [of depression] a little bit...I don't believe that at one point, a depressed mood starts and at another point, depressive disorder begins. There is of course a big transitional area, and it depends on the situation, the patient, and the doctor...I can't remember that I have ever actively looked for depression in a palliative patient (family physician [FP] D, focus group [FG] 1).

Interpreting Signs and Symptoms: Nature, Gravity, Consistency, and Expectations

The family physicians identified specific signs and symptoms that they related to depression: severe and persistent depressive feelings without moments of enjoyment or relief; flat affect; untreatable physical symptoms, or more suffering than would be expected from the medical condition; behavior that resulted in isolation and emotional distance from relatives and caregivers; a lack of growth toward accepting the end of life; and negative feelings or behavior that were not expected given the patient's character and background. As one physician stated:

The moment I think a person with cancer in this phase is depressed, then it [the behavior] has to differ from the pat- tern you expect there to be...and because you are a FP, you know how a patient normally reacts and whether it fits with the way I expect him to deal with this situation (FP H, FG 2).

The physicians reported that they often perceived the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition *(DSM-IV)* definition of depression as incompatible with the context of palliative care. They believed that the consistency and seriousness of the main symptoms of depression (depressive feeling and anhedonia) were important for diagnosis; however, they viewed additional criteria of depression, such as fatigue, weight loss, and anorexia, as inappropriate.

The Diagnostic Process: Observation, Communication, Screening Tools, and "Gut Feeling"

When asked how to diagnose depression in palliative care, the family physicians underscored the importance of mapping cognitions, social system, and the context of the patient to establish potentially changing patterns in feelings and behavior as a sign of psychological dis- tress. To explore the character, seriousness, and origin of depressive feelings, the physicians reported that they dis- cussed these aspects in open conversation with patients and, when relevant, also with partners and relatives.

They used the question "Do you feel depressed?" and saw it as useful for assessing the possibility of depression. Most physicians indicated that they relied on their clinical judgment and "gut feeling" rather than on screening instruments.

Management of Depression

General Management: Context, Attention, Communication, Support, and Autonomy

Whether or not the family physicians labeled patients as depressed, they stressed the importance of paying attention to depressive and anxious feelings; patients' cognitions, existential questions, and spiritual needs; and the perceptions and feelings of partners. They reported that they attended to the psychosocial con- text early in the palliative phase to anticipate problems. Intensive support, frequent visits, and open communication were important tools in their management of depression. The physicians had

observed that patients and families who felt that they could rely on their physician's support experienced less anxiety, more peace of mind, and decreased stress. Furthermore, physicians reported that they encouraged patients to make their own decisions in the palliative care trajectory as a means to increase their autonomy.

Specific Management, Referral, and Pharmacologic Treatment

Several family physicians reported that they sometimes found it helpful to refer patients to a psychologist, social worker, or palliative care team for support.

Physicians reported that they seldom prescribed antidepressants or stimulants, but those with greater expertise in palliative care indicated that they were more comfortable with diagnosing depression and deciding on pharmacologic treatment. The choice of medication was based on the nature of the psychological symptoms, the patient's age and life expectancy, comorbidities, and expected adverse effects.

Physicians who treated with antidepressants emphasized the importance of intensive support, especially in the beginning of the treatment, to increase treatment adherence. Pharmacologic treatment was always used in combination with psychotherapy or support.

Difficulties in Providing Palliative Care

Interfering With the Natural Process

The family physicians were reluctant to focus on depressive feelings out of fear of interfering with the process of patient adaptation, by negatively labeling it. Especially when it came to specific management, they expressed uncertainty. They often approached the possibility of depression indirectly with the patient, preserving a balance between focusing on patients' personal experiences and proactively managing depression. In view of this reservation, some physicians hesitated when it came to decisions about managing depressive symptoms with medication or psychotherapy. As one

physician articulated:

"I will not easily treat with antidepressants or diagnose depression because I don't want to interfere in the process of accepting the end of life" (FP V, FG 1).

Context and Uniqueness of the Patient

The family physicians emphasized the unique, dynamic situation of every patient that, in their opinion, made it difficult to follow general guidelines for diagnosis and management of depression, or even a specific guideline for depression in palliative care.

Time, Knowledge, and Focus of Attention

Time pressure was acknowledged as a structural barrier in palliative care in general and specifically in dealing with psychological issues. It limited conversations with patients and their partners.

Some physicians found it difficult to address the complete spectrum of palliative care, in particular, to discuss psychological or social aspects with patients and partners who were focused on the physical illness, as illustrated by the following comment:

When you're very busy with all the somatic issues and symptoms and the management of the whole palliative care, the situation and everything around this, you don't have room to reflect calmly, like, "How was the patient doing, what was the interaction, and can there be a depressive undertone?" (FP D, FG 3).

<u>Needs and Possible Solutions</u>

The family physicians noted shortcomings in the care for depression in patients on a palliative trajectory and indicated they would have liked to have more education, especially on identifying depression in palliative care, or support from a guideline, or access to questionnaires or criteria to distinguish between normal and abnormal depressive feelings.

Physicians with expertise in palliative care stressed the importance of having a routine when it came to the technical and logistical management of this

care, to create time for psychosocial care.

They pointed to the lack of collaboration with other disciplines, and lack of insight of those disciplines' possible contributions. They noted that promoting teamwork with family physicians, specialists in hospitals, therapists, palliative care or nursing teams, social workers, priests, or imams was valuable and might result in more attention to patients' psychological, emotional, social, and spiritual needs. Furthermore, they saw a larger role for mental health professionals who are trained to work with palliative care patients and their partners; as one physician commented, "I notice that there are few places where I can refer my [palliative care] patients to" (FP H, FG 2).

Discussion

The family physicians in this study reported that they were frequently confronted with depressive symptoms in their palliative care patients and in general felt competent to address this issue.

In supporting these patients, the physicians heavily relied on cumulative knowledge in determining whether patients had normal sadness or depression that required an intervention. They acknowledged the difficulty of discerning depression from normal sadness and sometimes experienced a lack of knowledge, time, and additional support sources, such as specialized psychologists.

To enhance management of depression in palliative care patients, family physicians suggested (1) specific attention to the diagnostic process of depression in palliative care patients in their professional education, (2) a specific and practical guideline for depression in palliative care, (3) a psychometric tool to assess depression in palliative care patients and to follow up on treatment, (4) the availability of mental health professionals trained in palliative care, and (5) enhanced collaboration with other health

care professionals.

The physicians reported that they valued their clinical judgment more than questionnaires. Other studies have similarly found that family physicians con- sider their practical wisdom and clinical judgment to be more important than objective assessments.[7] In this context, depression instruments can aid in shared decision making and monitoring.[26]

Most family physicians did not often explicitly diagnose a depressive disorder in palliative care patients. In fact, one physician expressed fear about interfering with the process of accepting the end of life by labeling sadness as pathologic. These findings contrast with those of an earlier study of depressed patients in primary care in which family physicians encouraged patients to view depression as separate from the self and normal sadness.[27] This difference between studies illustrates the specific context of palliative care patients requiring a different approach. A disadvantage of a conservative approach to diagnosing depression might be that depressed palliative care patients do not receive optimal treatment; however, if the supportive and contextual care that family physicians offer is adequate for most patients, it might spare many patients unnecessary intensive and sometimes harmful treatment.

Several palliative care guidelines call for proactive screening for and treatment of depression in patients with terminal cancer who have a limited survival time.[28,29] Models for active screening and treatment of mood symptoms are often based on the medical model, however, and that model does not consider family physicians' care to be the most adequate approach to addressing mood symptoms in palliative care. This situation might explain why some family physicians do not actively look for depression in palliative care patients, even though they are aware that depressive symptoms are quite common in this population. Family physicians seem to be more interested in clinical utility than in the validity of the diagnosis of depression.[30-32] They use a contextual concept of depression, which may reflect the patient-centered and context-specific care that is promoted in

family practice.[33,34] This viewpoint was also reflected in the comments of participants who maintained that because of a long-term relationship with patients, they were able to determine whether the patient's behavior was consistent with the pattern they would expect in the expression of normal sadness or whether it was consistent with pathologic sadness.

From the perspective of patient-centered care, it might prove helpful if family physicians spoke openly with their patients and caregivers about how to relate to sadness in the process of facing terminal illness in the patients' unique situation. Family physicians could inform their palliative care patients that depression is sometimes difficult to assess in the context of a palliative trajectory and that it needs monitoring.

Patients and caregivers could be encouraged to express how they value their sadness and whether they feel their sadness is normal or abnormal. Furthermore, the physicians should discuss with the patient and caregivers treatment options for depression, and both possible benefits and burdens in relation to the specific context of the patient. Practical advice for both patient and caregivers (such as seeking distraction and pleasant activities, approaching the patient not only in the patient role) can also be important.

To our knowledge, this is the first study to explore how family physicians address depression in palliative care. We used a purposive sampling strategy to reach an optimal variety of opinions. The limited number of physicians may limit extrapolation of the results to all family physicians but is considered adequate for a first in-depth exploration.[35] Although the study reflects the Dutch primary care context, we are confident that our findings are valuable more generally: first and foremost, the importance of palliative care, in or as close as possible to the patient's own environment, is a value shared by family physicians from many countries. In delivering care, the physicians in this study referred to their professional relationship with patients and their use of knowledge of patients and their family accumulated over time, which are core values of international primary care.[36]

In focus group discussions, participants influence each other; therefore, contrasting opinions and results may be silenced.[35] In this study, however, we found that all participants seemed to share their views openly, and we obtained a variety of opinions. We included group discussions with participants who did not know each other and group discussions with established groups in which members might be more used to challenging each other's views and opinions.

Although the moderator provided a broad working definition of a palliative care patient, almost all participants seemed to confine the discussion to patients with cancer. In future research, we recommend explicitly including in the discussion palliative care patients who do not have cancer. Family physicians might have a different approach to depression in this population.[37]

Two of the researchers who analyzed the data (F.W. and E.vR.) are family physicians and familiar with the practice of family medicine, and therefore are more likely to interpret the data in the appropriate context.

Finally, the opinions and experiences that the family physicians expressed and described do not provide data about the physicians' actual behavior and the effects on patient outcomes.

In conclusion, family physicians play a pivotal role in providing patient-centered and context-specific mental health care for palliative care patients. On the basis of the findings of this study, we suggest that family physicians acknowledge the importance of the diagnosis and management of depression in palliative care and monitor patients' psychological well-being over time. We recommend improving family physicians' education by building on the elements that our study participants presented in diagnosing depression and distinguishing it from normal sadness: strengthening continuity of care and relationship building with patients and their families, throughout the palliative trajectory, and explicitly addressing sadness as part of the normal process of coming to terms with the prospect of the end of life. Guidelines, criteria, and patient-friendly psychometric tools will

provide valuable support only when applicable in the context of such a person-centered approach. In this way, family physicians can be supported to further improve their approach to the complex situation of palliative care patients facing challenges in nearly all domains (physical, psychological, spiritual, and social). This approach acknowledges the importance and use of cumulative and contextual knowledge, which is a core quality of family practice.[38]

Finally, more research is needed to evaluate the actual diagnostic and therapeutic processes that family physicians use in managing depression in palliative care and the effects on their patients.

References

1. Akechi T, Okuyama T, Sugawara Y, Nakano T, Shima Y, Uchitomi Y. Major depression, adjustment disorders, and post-traumatic stress disorder in terminally ill cancer patients: associated and predictive factors. *J Clin Oncol.* 2004;22(10):1957-1965.
2. Irving G, Lloyd-Williams M. Depression in advanced cancer. *Eur J Oncol Nurs.* 2010;14(5):395-399.
3. Lloyd-Williams M, Friedman T, Rudd N. A survey of antidepressant prescribing in the terminally ill. *Palliat Med.* 1999;13(3):243-248.
4. Lloyd-Williams M, Shiels C, Taylor F, Dennis M. Depression—an independent predictor of early death in patients with advanced cancer. *J Affect Disord.* 2009;113(1-2):127-132.
5. Rayner L, Loge JH, Wasteson E, Higginson IJ; EPCRC, European Palliative Care Research Collaborative. The detection of depression in palliative care. *Curr Opin Support Palliat Care.* 2009;3(1):55-60.
6. Reeve JL, Lloyd-Williams M, Dowrick C. Revisiting depression in palliative care settings: the need to focus on clinical utility over validity. *Palliat Med.* 2008;22(4):383-391.

7. Dowrick C, Leydon GM, McBride A, et al. Patients' and doc- tors' views on depression severity questionnaires incentivised in UK quality and outcomes framework: qualitative study. *BMJ.* 2009;338:b663.

8. Horwitz AV, Wakefield JC. *The Loss of Sadness: How Psychiatry Transformed Normal Sorrow Into Depressive Disorder.* New York, NY: Oxford University Press; 2007.

9. van Rijswijk E, van Hout H, van de Lisdonk E, Zitman F, van Weel C. Barriers in recognising, diagnosing and managing depressive and anxiety disorders as experienced by family physicians; a focus group study. *BMC Fam Pract.* 2009;10:52.

10. Aabom B, Kragstrup J, Vondeling H, Bakketeig LS, Stovring H. Does persistent involvement by the GP improve palliative care at home for end-stage cancer patients? *Palliat Med.* 2006;20(5):507-512.

11. Neergaard MA, Vedsted P, Olesen F, Sokolowski I, Jensen AB, Sondergaard J. Associations between successful palliative trajecto- ries, place of death and GP involvement. *Scand J Prim Health Care.* 2010;28(3):138-145.

12. Andersson SJ, Troein M, Lindberg G. Conceptions of depressive disorder and its treatment among 17 Swedish GPs. A qualitative interview study. *Fam Pract.* 2001;18(1):64-70.

13. Chew-Graham CA, Mullin S, May CR, Hedley S, Cole H. Managing depression in primary care: another example of the inverse care law? *Fam Pract.* 2002;19(6):632-637.

14. Delgado-Guay M, Parsons HA, Li Z, Palmer JL, Bruera E. Symptom distress in advanced cancer patients with anxiety and depression in the palliative care setting. *Support Care Cancer.* 2009;17(5):573-579.

15. Mystakidou K, Parpa E, Tsilika E, et al. Preparatory grief, psycho- logical distress and hopelessness in advanced cancer patients. *Eur J Cancer Care (Engl).* 2008;17(2):145-151.

16. Periyakoil VS, Hallenbeck J. Identifying and managing preparatory grief and depression at the end of life. *Am Fam Physician.* 2002; 65(5):883-890.

17. van der Akker P, Luijkx K, van Wersch S. Wetenschappelijk Rapport: Waar wilt u doodgaan? Keuzen en overwegingen. 2005. http://www.vptz.nl/dynamic/media/1/documents/wetensch_rapport_waar_wilt_u_doodgaan.pdf. Accessed June 10, 2012.

18. Kreuger RA, Casey MA. *Focus Groups. A Practical Guide for Applied Research.* 3rd ed. Thousand Oaks, CA: Sage Publications; 2000.

19. NHG Standaard Depressieve Stoornis. 2010. http://depressie.wikidot.com/nhg-standaard-depressieve-stoornis. Accessed June 10, 2012.

20. Bannink M, Monster JC. Richtlijn Depressie versie 2.0. In: *Richtlijnenboek Palliatieve zorg.* The Netherlands: Vereniging van Integrale kankercentra; 2010.

21. Hotopf M, Chidgey J, Addington-Hall J, Ly KL. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. *Palliat Med.* 2002;16(2):81-97.

22. Ly KL, Chidgey J, Addington-Hall J, Hotopf M. Depression in palliative care: a systematic review. Part 2. Treatment. *Palliat Med.* 2002;16(4):279-284.

23. Cutcliffe JR. Adapt or adopt: developing and transgressing the methodological boundaries of grounded theory. *J Adv Nurs.* 2005; 51(4):421-428.

24. Strauss AL. *Qualitative Analysis for Social Scientists.* Oxford, England: Cambridge University Press; 1987.

25. Britten N. Qualitative interviews in medical research. *BMJ.* 1995; 311(6999):251-253.

26. Baik SY, Gonzales JJ, Bowers BJ, Anthony JS, Tidjani B, Susman JL. Reinvention of depression instruments by primary care clinicians. *Ann Fam Med.* 2010;8(3):224-230.

27. Johnston O, Kumar S, Kendall K, Peveler R, Gabbay J, Kendrick T. Qualitative study of depression management in primary care: GP and patient goals, and the value of listening. *Br J Gen Pract.* 2007;57(544):872-879.

28. Qaseem A, Snow V, Shekelle P, et al; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Evidence-based interventions to improve the palliative care of pain, dyspnea, and depression at the end of life: a clinical practice guideline from the American College of Physicians. *Ann Intern Med.* 2008;148(2):141-146.

29. Stiefel R, Die Trill M, Berney A, Olarte JM, Razavi A. Depression in palliative care: a pragmatic report from the Expert Working Group of the European Association for Palliative Care. *Support Care Cancer.* 2001;9(7):477-488.

30. Dowrick C. When diagnosis fails: a commentary on McPherson & Armstrong. *Soc Sci Med.* 2009;69(8):1144-1146.

31. McPherson S, Armstrong D. Negotiating 'depression' in primary care: a qualitative study. *Soc Sci Med.* 2009;69(8):1137-1143.

32. van Weel C, van Weel-Baumgarten E, van Rijswijk E. Treatment of depression in primary care. *BMJ.* 2009;338:b934.

33. Epstein RM, Street RL Jr. The values and value of patient-centered care. *Ann Fam Med.* 2011;9(2):100-103.

34. Lloyd-Williams M, Reeve J, Kissane D. Distress in palliative care patients: developing patient-centred approaches to clinical management. *Eur J Cancer.* 2008;44(8):1133-1138.

35. Kitzinger J. Qualitative research. Introducing focus groups. *BMJ.* 1995;311(7000):299-302.

36. Allen J, Gay B, Crebolder H, Heyrman J, Svab I, Ram P. *The European Definition of General Practice/Family Medicine.* European Academy of Teachers in General Practice Council. Evans P, ed. Pre- pared for WONCA Europe; 2005. http://www.woncaeurope.org/ content/european-definition-general-practicefamily-medicine-2005. Accessed June 10, 2012.

37. Patten SB, Williams JV, Lavorato DH, Modgill G, Jetté N, Eliasziw M. Major depression as a risk factor for chronic disease incidence: longitudinal analyses in a general population cohort. *Gen Hosp Psychiatry.* 2008;30(5):407-413.

38. Burroughs H, Lovell K, Morley M, Baldwin R, Burns A, Chew-Gra- ham C. 'Justifiable depression': how primary care professionals and patients view late-life depression? A qualitative study. *Fam Pract.* 2006;23(3):369-377.

Chapter 8

General Discussion

"After prolonged suffering the eyes become dull and lack expression, and are often slightly suffused with tears. The eyebrows not rarely are rendered oblique, which is due to their inner ends being raised. This produces peculiarly-formed wrinkles on the forehead which are very different from those of a simple frown; though in some cases a frown alone may be present. The corners of the mouth are drawn downwards, which is so universally recognized as a sign of being out of spirits, that it is almost proverbial."[1]

Charles Robert Darwin 1809-1882

The aim of this thesis was to explore depression in palliative care in different health care settings. This exploration was not confined only to the presence of a specific depressive disorder only in palliative care patients, but also explored depression in relation to normal sadness in patients with an intractable disease. This final chapter offers a summary and critical appraisal of the main findings of the studies performed and presented in this thesis and highlights some of the strengths and limitations of this exploration in relation to the findings of other research groups. Next, I will discuss the main findings concerning my initial research questions presented in chapter 1: (1) the prevalence of depression in palliative care, (2) the use of screening

instruments for depression in palliative care and (3) the patient and physicians perspectives on depression in palliative care. Finally, I will conclude with discussing how to use the concept of depression in palliative care and formulate some relevant recommendations for the clinical practice and future research in different palliative care settings.

8.1 Summary of main findings

In chapter 2 and 3 we explored the question about the incidence and prevalence of depression in palliative care patients. Chapter 2 reports about a history cohort study, using a 20-year period registration database of medical records in four Dutch general practices (Continuous Morbidity Registration database) to explore the incidence of a depressive disorder in the last phase of life of patients who died from cardiovascular disease, cancer or COPD, in a sample of primary care patients. In total 982 patients were included of which nineteen patients (1.9%) were diagnosed with a depressive disorder in the last year of their life. We concluded that the incidence of depressive disorder in the last phase of life as diagnosed in actual patient care in a primary care setting, is remarkably lower than expected. In chapter 3, we studied the prevalence of depressive disorder by performing a structured clinical assessment (SCAN 2.1) in a sample of 64 advanced cancer outpatients. The main finding of a prevalence of depressive disorder in this selected patient group of 3%, confirms a low prevalence of depressive disorder in palliative care patients in comparison with the prevalence reported by other studies.

In chapter 4 and 5 we explored the use of screening tools for depression in palliative care patients. Chapter 4 reports on the validity of the Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depression in advanced cancer patients. The mood section of the PRIME-MD was used as a gold standard. Complete data were obtained from 46 patients. The area under the curve of the receiver operating characteristics analysis of the BDI-II was 0.82 and the optimal cut-off point

of the BDI-II was 16 with a sensitivity of 90% and a specificity of 69%. The single screening question showed a sensitivity of 50% and a specificity of 94%. We concluded that the BDI-II seemed an adequate screening tool for depression in advanced cancer patients and that the sensitivity of a single screening question is poor. In chapter 5 we explored the relationship between scores on screening tools for depression (Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC), Hospital Anxiety and Depression Scale (HADS)) and different physical symptom clusters in a sample of 65 patients. In this study, we found that screening instruments for depression correlated highly with different somatic symptom clusters. The BDI-II cognitive subscale was the only scale that was not significantly correlated with any of the somatic symptom clusters. We conclude that screening tools for the detection of depression in patients with advanced cancer may not provide an accurate evaluation of depression because they may measure physical symptom burden as well, especially when patients suffer from symptoms of the clusters fatigue/anorexia/ cachexia, neuropsychology, debility, or pain.

In Chapter 6 we report the findings of an exploration of views of palliative care patients on resources and ways of coping that help them prevent or manage mood symptoms. We performed a qualitative study through face-to-face semi-structured interviews with 15 ambulant patients with advanced cancer. Patients reported on attitudes and specific coping strategies that are helpful, as well as aspects of their life narrative and spirituality. Resources were found in meaningful contacts with family and friends and in personal attention of professional medical caregivers for their wellbeing. From this study, we conclude that palliative care patients can identify resources to cope with symptoms of depression in the context of their unique life. We suggest that helping patients to identify their personal resources can support patient autonomy and patient resilience.

Finally, in chapter 7 we report about opinions of general practitioners regarding the recognition, diagnosis, and management of depression in palliative care patients. We conducted four focus group discussions with 22

general practitioners. We found that the general practitioners described the diagnostic and therapeutic process for depression in palliative care patients as continuous and overlapping with the physical, social and existential dimensions of palliative care. Differentiating between normal and abnormal sadness was viewed as challenging. The general practitioners did not strictly apply criteria of depressive disorder but rather relied on their clinical judgment and considered patients' context and background factors very important. They indicated that managing depression in palliative care patients is mainly supportive and nonspecific. We concluded from this study that general practitioners rely on their open communication and a long-standing physician-patient relationship when diagnosing and managing depression in a palliative care patient. They considered the context of their patient's life of great importance. This approach fits in the model of patient-centered care that is promoted in primary care nowadays.

8.2 Strengths and limitations of this exploration of depression in palliative care

The strength of our studies presented in this thesis is that we studied depression from multiple perspectives. We analysed prospective patient data from actual patient care in primary care in a validated database of a stable patient population in one area of the Netherlands. Furthermore, we studied both prevalence and incidence of depression in palliative care patients. Next we used both quantitative and qualitative methods and finally we considered the opinions on depression of both practitioners and patients by analysis of focus group discussions and interviews.

The limitations of our studies presented in this thesis are the following: firstly, recruiting appropriate patients meeting the inclusion criteria for the different studies in palliative care research is extremely difficult. Although the generalizability of our database study (Chapter 2) is high, several other studies in this thesis have rather small samples, limiting the strength of the

external validity. Although we made important efforts to include as many patients as possible in our study of the prevalence of depression in palliative care patients (Chapter 3) and the use of screening tools for depression in palliative care patients (Chapter 4 and 5), a considerable drop out during these studies has been observed. Possibly, this can result in a selection bias since the most deteriorated patients may have dropped out. It was not possible to determine whether these patients were also those with more depression. Furthermore, participation in research is voluntary and selection bias may also have occurred because depressed patients may be less likely willing to participate in research.

Another concern about the external validity is that most of the patients in both our quantitative and qualitative studies were oncological patients. We cannot automatically extrapolate our results towards palliative patients with cardiovascular disease or COPD.

The recruitment of the general practitioners for the focus group analysis may be biased by the fact that general practitioners who are interested and active in palliative care settings are more willing to participate in these research activities, although we made efforts to include general practitioners from a variety of primary care settings and with different levels of expertise in palliative care.

8.3 The prevalence and incidence of depression in palliative care patients is low

We have studied both the prevalence and the last-year-of-life incidence of depression. Most previous studies about depression in palliative care are cross-sectional and thus only report prevalence. In studying the prevalence of a depressive disorder in the last phase of life, we have found remarkably low numbers in comparison to other research groups. Two systematic reviews report a relatively high prevalence of depressive disorder in palliative care patients (up to 69%)[2,3]. However, one of the reviews also

reports that the quality of the evidence was poor and that the samples of patients were generally small[3]. Although the other review has been based on a literature search, no details were provided of the review methodology and the influence of study quality on the outcomes[2]. Therefore, although the findings of the reviews contrast with the findings of our study, we consider the low prevalence found in our study a valid result. This finding is confirmed by the low incidence of depressive disorder in the last year of life that we have found as a valid result from reliable, real life data.

We have identified four possible factors that may influence the reported prevalence and incidence of depression in palliative care patients: the method of assessment, the assessor, the patient sample and the context of the assessment.

Firstly, there is no consensus on the method of assessment of depression in palliative care patients. It is obvious that the reported prevalence of depression is dependent on the method of assessment of depression. Previous studies show that the more robust the method, the lower the prevalence of depression that is found[4]. In one of our studies (Chapter 3), the reported prevalence of depressive disorder (3%) may indeed have been low because the SCAN 2.1 is a robust clinical interview.

Secondly, the assessor may play an important role in finding a low prevalence of depression in palliative care patients. In studying the incidence of depression in the last phase of life in the Continuous Morbidity Registration (Chapter 2), the assessment was performed by general practitioners. As we report in Chapter 7, general practitioners frequently use a contextual concept of depression in which they do not strictly follow DSM-IV criteria for depression and sometimes are even reluctant to diagnose depression in the last phase of life. They consider sadness as appropriate in the context of palliative care and are primarily concerned with helping the patient to improve empowerment without medicalizing normal sadness. Possibly, this contributed to the finding of a low incidence of depression in the sample of patients that participated in our studies.

Thirdly, as reported already in the strengths and limitations section, our selected patient sample specifically recruited for the purpose of this research on depression may be biased by the inclusion of a sample of patients with less depressive complaints since patients with more advanced disease are mostly no longer in the capacity of participating in clinical studies[5].

Finally, the context in which diagnoses for depression are made could have influenced the findings. In the CMR database (Chapter 2), diagnoses of depression were made in the context of actual patient needs and in the context of the delivered care by primary care physicians. Patients seeking for help are different from patients in the general population without an explicit reason to seek help, not only in the prevalence of depression, but also in their expectations for support[6]. In primary care, the diagnostic process for depression is not explicitly focussed on depressive disorder as defined by the DSM IV criteria; diagnoses are made in the context of patients needs in contrast with population research.

Notwithstanding the findings in these studies that the prevalence and incidence of depression in palliative care patients is low, this does not imply that there is no patient need for care for mood symptoms, even in patients who are not diagnosed with depression. For future research, it might be helpful to focus on patients' needs along with specific disease characteristics to improve the analysis of the prevalence. Consequently, our knowledge about patients' needs to support their depressive complaints will improve and can result in better patient care.

8.4 A limited use for screening instruments for depression in palliative care patients

In clinical practice, a screening tool supports physicians to better identify possible depressions in their patients. Hence, a better attention and focus will be given to the mental health status of palliative care patients, resulting

in better assessments and appropriate treatment and support for the depressed patient in a palliative trajectory[7]. Most screening instruments are presented with psychometric values (such as sensitivity and specificity) that give an indication about the validity of a screening instrument. In our study of the BDI-II (Chapter 4) we conclude that the BDI-II seems to be an adequate screening tool to detect a depressive disorder in patients in a palliative trajectory because it has a high sensitivity (90%) and adequate specificity (69%).
However, when using screening instruments for depression in palliative care patients we should use appropriate measurement instruments that are specifically developed for the detection of the problem we want to observe, limiting the false positive or false negative results. If the prevalence of a depressive disorder is indeed much lower than previously assumed, we will detect more false positives with the specific screening instrument resulting in unnecessary medicalization of many cases without a real depressive disorder. Those false positive cases may be caused by feelings of normal sadness that are very common in a palliative care context.

Because of the low prevalence of depressive disorder and the test characteristics of the available screening instruments, we propose not to screen for depressive disorder in palliative patients in primary care. Instead, we advocate a person-centered approach with specific attention for emotional symptoms.

8.5 Different perspectives on depression in palliative care: bridging the gap between the assessment of depression and the experience of the patient

From our qualitative interview study (Chapter 6), we conclude that palliative care patients can identify positive resources to cope with their symptoms of depression in the context of their own life situation. Previous research in general practice confirms that patients are able to identify personal health

resources and it is suggested that general practitioners (GPs) should help patients to identify and mobilize those resources within the unique context of each individual patient[8]. This offers a new opportunity for the management of depression in palliative care patients. As reported by the focus group study (Chapter 7), GPs try to optimize their support to palliative care patients to minimize suffering and increase well being in the context of each patient's unique life. While doing this, GPs do not rely on a specific disease model in the care for their palliative care patients. This attitude fits with the perspective of their patients who experience symptoms in the context of facing the loss of their physical health, independency, social role, of friends and family and eventually the loss of life itself.

Professional caregivers who do use the disease model to relate to feelings of sadness may be more inclined to look at the content of symptoms with the purpose to make a diagnosis and subsequently offer an intervention. They primarily use their professional expertise. In contrast, professional caregivers who consider symptoms in the context of what is happening in a person's life will be more inclined to take into account the personal experience of the patient[9-11]. They use their personal relationship with the patient to clarify, in a communal process with their patient, the optimal strategy or intervention. We feel that the latter model is more appropriate for the management of emotional symptoms in palliative care patients, partly because this model is more in agreement with what patients think and experience, partly because there are several concerns about the disease model, as exemplified by the DSM model[12-15]. Those concerns may be even greater in the palliative care context. Firstly, especially in the palliative care, it can be challenging, if not impossible, to determine accurately whether sadness experienced by a palliative care patient is a normal reaction in relation to the stressful situation of facing a terminal illness, or whether the sadness is a symptom of a disease. Secondly, sadness as perceived by physicians, may change over time, in different cultures. Changes in perspectives on depression in palliative care may result in an emphasis on either the concern for overmedicalization and overtreatment of normal

sadness or the under diagnosis of depressive disorder in palliative care patients[16-17]. Moreover, the perspective of health care givers influences the interpretation of a supposedly clear and objective definition such as a depressive disorder.

8.6 Normal sadness and depression in the practice of integral palliative care

In giving direction to the assessment of depression in palliative care patients in line with the more multidimensional concept of depression proposed in the previous paragraph, we recommend that health care professionals should consider to use case formulation when assessing emotional issues, instead of assessing a depressive disorder. We argue that if we direct our attention on the assessment of depression this may cause many false positive cases of depressive disorder, thereby medicalizing normal sadness and possibly even resulting in a lack of attention for normal sadness. Many palliative care patients without a depressive disorder or depression may benefit from professional emotional support for their normal sadness.

Case formulations – as a manifestation of person-centred care - are used in situations when there are no discrete entities with natural boundaries that separate them from other disorders or problems. This method comprises a multidimensional inventory of problems and needs and the formulation of the presenting problem, the predisposing factors, precipitating factors, the perpetuating factors, protective factors and positive factors all related to the context of emotional aspects experience by a palliative care patient[18]. We argue that in a palliative care context, a case formulation offers a more accurate and useful representation that may also bridge the gap between assessment and treatment. Furthermore, it can give direction in both attending to the problems as well as to positive factors and thus help us to provide integral palliative care.

According to the WHO definition of palliative care, palliative care affirms life, while regarding dying as a normal process. This normal process in an individual patient can be accompanied by sadness, anxiety and other symptoms, but also with other factors such as vitality, humour, hope, courage, friendships and many more expressions of positive qualities. We advocate that in integral multidimensional palliative care we should improve inconvenient symptoms and at the same time provide support to strengthen resources.

In the last decades, increasing attention is given to preventive medicine and the advertisement of healthy behaviour[19]. In this model of thinking about health care, the distinction between 'normal' and 'abnormal' becomes less important. From the idea that every person will face adversity in his life and not all suffering can be prevented, the model of salutogenesis is used instead of pathogenesis in order to identify resources and increase resilience against adversity[20]. This seems to be an approach that can be adapted to the complex context of palliative care when it may not be possible to alleviate all symptoms and in which the outcome will certainly be death. One could argue that in palliative care we should focus most on optimally alleviating all symptoms to allow the patient to live his life without symptoms. But even if we could alleviate all symptoms until the patient dies, one could also argue that life may be more than just living without symptoms. Instead of almost exclusively focusing our palliative care on the alleviation of symptoms, we could also ask our patients: What does your life stand for? What do you still want with your life? How can we support you in this? We would move from a model of disease and symptoms, to a model of what it means to live in a valuable way until one dies. In this person-oriented care the relationship between patient and caregiver is important in openly exploring what would be a valuable way for patients to live their remaining lifetime. This view is not a denial of disease and symptoms, but an integration of both positive and negative in finding the optimal balance for valued living.

8.7 Main conclusions and recommendations

The title of this thesis indicates a distinction between normal sadness and depression in palliative care. Firstly, we conclude that the ambiguous use of the terminology of depression and sadness in palliative care both in clinical practice and research causes much obscurity. An applicable, definitive definition of depression in palliative care and its distinction from normal sadness is not available, mainly because it is dependent on many personal and context-related factors. Therefore, we recommend that both researchers and clinicians explicitly define the concept of depression that is used in their clinical practice and research.

Furthermore, from our exploration of depression in palliative care, we conclude that depression is not a common disease in palliative care patients and that if we aim for the assessment of depression in palliative care patients, we will medicalize cases of normal sadness into disorder. Recently a guideline has been developed by the European Association of Palliative Care to inform practice, establish policy and promote European consensus around depression in palliative care patients[21]. Although we agree with many of the recommendations in this guideline on the prevention of depression in palliative care, we disagree with the specific focus on diagnosing depressive disorder with a psychiatric assessment. We recommend that in palliative care emotional issues are addressed and sadness is explicitly identified as part of the normal process of coming to terms with the prospect of the end of life. We recommend a context-related, patient-centred approach for both normal sadness and depression in palliative care patients in a multidisciplinary team.

Furthermore, we recommend using case formulation when assessing emotional issues in palliative care patients, in contrary to the assessment of a possible depressive disorder. A case formulation may bridge the gap between assessment and treatment and can give direction in both attending to the problems as well as to positive factors and thus help us to provide integral palliative care. Moreover, we recommend discussing emotional

issues with palliative care patients in an open communication that addresses both the symptoms as well as the factors that may increase resilience, thereby preventing depressive disorder.
Specifically for general practice we recommend general practitioners to strengthen their continuity of care and relation building with palliative care patients and their families, throughout the palliative trajectory. Finally, we recommend more research on specific interventions that can increase resilience in the end of life phase, such as dignity therapy [22], narrative therapy [23] and other psychological interventions.

In palliative care there seems to be agreement on the importance of using a holistic, integral model of palliative care to address the different dimensions of physical, psychological, social and spiritual care. Within this model, however, there is always the individual patient to attend to. Whatever dimension we are addressing, a key element seems to be to connect to the individual patient and his or her context. This is essential in the communal process that we go through together with our patient, navigating through the complexity of physical, psychological, social and spiritual issues that can all be interrelated. The model of different dimensions of palliative care can be our nautical chart, and a very helpful one, but the actual sailing we have to do together with our patient.

The same may be true when addressing symptoms of depression in a palliative care context. Some of the general practitioners in our study (Chapter 7) explicitly reported using models, guidelines and screening tools for depression. They also recognized however that these instruments are limited when it comes to making an assessment in the individual context of the patient. Sometimes they feel it is appropriate, based on their 'cumulative knowledge' and their actual connection with the patient, to classify symptoms of mood as 'normal sadness' for which they will also provide care and attention. Assessing depression in palliative care remains a challenge, but being aware of the available models and screening tools and interpret them in the context of the individual patient may do justice to the high-quality patient-centred care that we are aiming for. Furthermore,

working in a multidisciplinary team, in which each professional brings his expertise, it is important that we communicate about the way we navigate as a team, together with the patient. If we all can bring our expertise and orient our care as a team within the context of the individual, the patient might benefit the most.

The challenge of health care and health care education is to allow models, protocols and frameworks to help us orient theoretically and, when bringing this knowledge into the context of the patient, to remain aware that the patient is the true reference point of our care.

References

1. Darwin CR. *The Expression of the Emotions in Man and Animals*, 1872.
2. Hotopf M, Chidgey J, Addington-Hall J, Ly KL. Depression in advanced disease: a systematic review Part 1. Prevalence and case finding. *Palliative medicine* 2002;16(2):81-97.
3. Irving G, Lloyd-Williams M. Depression in advanced cancer. *European journal of oncology nursing : the official journal of European Oncology Nursing Society* 2010;14(5):395-99.
4. Mitchell AJ, Chan M, Bhatti H, Halton M, Grassi L, Johansen C, et al. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. *The lancet oncology* 2011;12(2):160-74.
5. Ruijs CD, Goedhart J, Kerkhof AJ, van der Wal G, Onwuteaka-Philipsen BD. Recruiting end-of-life cancer patients in the Netherlands for a study on suffering and euthanasia requests. *Family practice* 2011;28(6):689-95.

6. olde Hartman TC, van Ravesteijn H, Lucassen P, van Boven K, van Weel-Baumgarten E, van Weel C. Why the 'reason for encounter' should be incorporated in the analysis of outcome of care. *The British journal of general practice : the journal of the Royal College of General Practitioners* 2011;61(593):750-1.

7. Kelly B, McClement S, Chochinov HM. Measurement of psychological distress in palliative care. *Palliative medicine* 2006;20(8):779-89.

8. Malterud K, Hollnagel H. Positive self-assessed general health in patients with medical problems. A qualitative study from general practice. *Scandinavian journal of primary health care* 2004;22(1):11-5.

9. Heath I. Divided we fail. *Clinical medicine (London, England)* 2011;11(6):576-86.

10. McCormick J. Death of the personal doctor. *Lancet* 1996;348(9028):667-8.

11. McWhinney IR. Are we on the brink of a major transformation of clinical method? *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne* 1986;135(8):873-8.

12. Horwitz AV, Wakefield JC. *The loss of sadness; How psychiatry transformed normal sorrow into depressive disorder*: Oxford University Press, 2007.

13. Burgy M. Phenomenological investigation of despair in depression. *Psychopathology* 2008;41(3):147-56.

14. Kokanovic R, Bendelow G, Philip B. Depression: the ambivalence of diagnosis. *Sociology of health & illness* 2012.

15. Kokanovic R, Butler E, Halilovich H, Palmer V, Griffiths F, Dowrick C, et al. Maps, models, and narratives: the ways people talk about depression. *Qualitative health research* 2013;23(1):114-25.

16. Barley EA, Murray J, Walters P, Tylee A. Managing depression in primary care: A meta-synthesis of qualitative and quantitative research from the UK to identify barriers and facilitators. *BMC family practice* 2011;12:47.

17. Haddad M, Menchetti M, Walters P, Norton J, Tylee A, Mann A. Clinicians' attitudes to depression in Europe: a pooled analysis of Depression Attitude Questionnaire findings. *Family practice* 2012;29(2):121-30.

18. Macneil CA, Hasty MK, Conus P, Berk M. Is diagnosis enough to guide interventions in mental health? Using case formulation in clinical practice. *BMC medicine* 2012;10:111.

19. Lindstrom B, Eriksson M. The salutogenic approach to the making of HiAP/healthy public policy: illustrated by a case study. *Global health promotion* 2009;16(1):17-28.

20. Eriksson M, Lindstrom B. A salutogenic interpretation of the Ottawa Charter. *Health promotion international* 2008;23(2):190-9.

21. Rayner L, Price A, Hotopf M, Higginson IJ. The development of evidence-based European guidelines on the management of depression in palliative cancer care. *European journal of cancer (Oxford, England : 1990)* 2011;47(5):702-12.

22. Chochinov HM, Kristjanson LJ, Breitbart W, McClement S, Hack TF, Hassard T, et al. Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomised controlled trial. *The lancet oncology* 2011;12(8):753-62.

23. Stanley P, Hurst M. Narrative palliative care: a method for building empathy. *Journal of social work in end-of-life & palliative care* 2011;7(1):39-55.

Epilogue

"It is not possible to leave death to the dying."

Irving Yalom, Existential Psychotherapy

This thesis started with surprise and it will end with surprise. Surprise can be a powerful pointer: it can disclose our expectations and convictions, even those of which we are not aware. When we give surprise some space, it can help us to start questioning and it can offer us the openness to look from a different perspective than we are used to.

Personally, I have been surprised by many of the patients that I have met in this research project. Mainly, I have been surprised by their courage and their willingness to share with a curious stranger what they knew about being sad and being happy in the context of the end of their life. I have also been surprised by the resilience of many patients to what seems sometimes intolerable or unbearable. During my exploration of depression in palliative care, it was my intention to always remain connected to the perspective of the patient as a true reference point of my search. Sometimes the methods of science seemed to distract me from this reference point and in my experience this created some rigidity in the exploration. I did not always find it easy to hold the balance between science and the connection with another human being. With this thesis, I hope I have done justice to both the patients and science. I would like to end this thesis with a few personal observations that I have found valuable.

Living and caring in the light of death

In his book Existential Psychotherapy, Irving Yalom writes that it is not possible to leave death to the dying. Not only does dying sometimes happen in our presence and do we have a personal (and for health caregivers a professional) obligation to relate to dying and to care for the dying, but also our own mortality frequently compels us to actively relate to dying. Although the moment of death seems to be a very precise and well-defined event and although many of us are only occasionally aware of the presence of death in our lives, death continuously accompanies our lives psychologically. From this perspective, life and death exist simultaneously, not consecutively. Awareness of impermanence forms an important and valuable therapeutic starting point and potential for change in the existential psychotherapy of Irving Yalom. Especially when working with palliative care patients it is inevitable that we are frequently confronted with impermanence and also our own mortality. If we shy away from this confrontation, this will most likely influence the relationship that we have with our patients and possibly disable us to optimally connect and deliver well-attuned care for our patient. However, if we allow the experience of relating to our own dying to be a potential for change, we may find the richness and personal growth that many people who work in palliative care experience. In one of the interviews for this thesis, a patient explained to me how he thought that relating to his own dying was not such a difficult thing, simply because it was not a surprise. He had been aware of his mortality most of his life and had already accepted that dying would be part of his life. Working in palliative care invites us to bring our whole selves to the experience and may offer us the possibility to embrace dying and at the same time value our lives and live fully.

The importance of connection

In my exploration during this research, I have found that my connection with the patient was primary to all other objects and goals I may have had. If there was no connection, there was no common ground from which to explore and question. When the connection from my side was clouded by a goal-oriented attitude, the meeting with the patient and the experience shared by the patient were often shallow and superficial. In contrast, the meetings when I felt I did not know exactly what to say or what to do, and only tried to be present with the patient and what was arising, were often the richest both in the shared information as well as in the felt connection.

A caregiver-patient relationship may also sometimes be clouded by identification with roles and a goal-oriented attitude. The caregiver may be occupied with categorizing symptoms, registering diagnosis and following guidelines and protocols. However, the first thing that happens when a caregiver meets a patient is that a human being meets another human being. If we can value the nakedness of this meeting and dare to stand in this essence of connection, we may find that this connection facilitates and enriches our work. It may even be that this connection is the medium where most of our healing, also when it comes to complaints of sadness or depression, takes place.

Summary

This thesis explores depression in palliative care patients. The **prologue** illustrates the origin of my personal interest in this subject.

Chapter 1 gives a general introduction to the subject of depression in palliative care and provides the research objectives and outline of the thesis. Firstly, it illustrates the context of palliative care and secondly, it highlights the complexity of depression in a palliative care context and the relevance of right understanding and correct management of depression in palliative care. Furthermore it explicitly focuses on the problems that are encountered around this subject: applying the definition of depression in a palliative care context, differentiating between depression and normal sadness and the use of screening instruments for depression in a palliative care context. Finally, Chapter 1 concludes with the research objectives and an outline of the thesis in the following chapters.

Chapter 2 reports about a historic cohort study, using a 20-year period registration database of medical records in four Dutch general practices (Continuous Morbidity Registration database) to explore the incidence of depressive disorder in the last phase of life of patients who died from cardiovascular disease, cancer or COPD, in a sample of primary care patients. The data were derived from actual patient care in general practice where diagnoses were made by general practitioners in the context of patient needs and the delivered care. In total 982 patients were included. Nineteen patients (1.9%) were diagnosed with a depressive disorder in the last year of their life. We concluded that the incidence of depressive disorder in the last phase of life is remarkably lower than expected.

In **Chapter 3** we studied the prevalence of depressive disorder by performing a structured clinical assessment (SCAN 2.1) in a sample of 64 advanced cancer outpatients. In finding a prevalence of depressive disorder of 3% in our patient sample, we concluded that there is a low prevalence of depressive disorder in advanced cancer patients.

Chapter 4 reports on the validity of the Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depressive disorder in advanced cancer patients. Patients with advanced metastatic disease, visiting the outpatient palliative care department, were asked to fill out a self-questionnaire containing the Beck Depression Inventory (BDI-II) and a single screening question "Are you feeling depressed?" The mood section of the PRIME-MD was used as a gold standard. Sixty-one patients with advanced metastatic disease were eligible to be included in the study and complete data were obtained from 46 patients. The area under the curve of the receiver operating characteristics analysis of the BDI-II was 0.82. The optimal cut-off point of the BDI-II was 16 with a sensitivity of 90% and a specificity of 69%. The single screening question showed a sensitivity of 50% and a specificity of 94%. We concluded that the BDI-II seemed an adequate screening tool for a depressive disorder in advanced cancer patients and that the sensitivity of a single screening question is poor.

In **Chapter 5** we explored the relationship between physical symptom burden and psychological distress in palliative care patients in relation to scores on screening instruments for depression. In a sample of 65 patients, we explored the relationship between scores on screening tools for depression (Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC), Hospital Anxiety and Depression Scale (HADS)) and different physical symptom clusters. The physical symptoms were assessed with the Memorial Symptom Assessment Scale Short Form (MSAS-SF). In this study, we found that screening instruments for depression correlated highly with different somatic symptom clusters. The BDI-II cognitive subscale was the only scale that was not significantly correlated with any of the somatic symptom clusters. We conclude that screening tools for the detection of depression in patients with advanced cancer may not provide an accurate evaluation of depression because they may measure physical symptom burden as well, especially when patients suffer from symptoms of the clusters fatigue/anorexia/ cachexia, neuropsychology, debility, or pain.

The BDI-II cognitive subscale seemed to differentiate best from somatic symptom burden.

In **Chapter 6** we report on an exploration of views of palliative care patients on resources and ways of coping that help them prevent or manage mood symptoms. We performed a qualitative study through face-to-face semi-structured interviews with fifteen ambulant patients with advanced cancer. The interviews were transcribed verbatim and qualitative analysis was independently performed by two researchers, according to the principle of constant comparative analysis. Patients reported on attitudes and specific coping strategies that they found helpful, as well as aspects of their life narrative and spirituality. Resources were found in meaningful contacts with family and friends and in personal attention of professional medical caregivers for their wellbeing. From this study, we conclude that palliative care patients can identify resources to cope with symptoms of depression in the context of their unique life and we suggest that in helping patients to identify the personal resources that are accessible and available in their specific context, patient autonomy in enhancing resilience can be increased.

Chapter 7 reports about opinions of general practitioners regarding the recognition, diagnosis, and management of depression in palliative care patients. We conducted four focus group discussions in a sample of twenty-two general practitioners with varied practice locations and varying expertise in palliative care. Transcripts were analyzed independently by 2 researchers using constant comparative analysis in ATLAS.ti. We found that the general practitioners described the diagnostic and therapeutic process for depression in palliative care patients as a continuous and overlapping process. Differentiating between normal and abnormal sadness was viewed as challenging. The general practitioners did not strictly apply criteria of depressive disorder but rather relied on their clinical judgment and strongly considered patients' context and background factors. They indicated that managing depression in palliative care patients is mainly supportive and nonspecific. Antidepressant drugs were seldom prescribed. The general practitioners also described difficulties in diagnosing and treating depression

in palliative care, and we report their suggestions to improve management of depression in palliative care patients in primary care. We conclude from this study that general practitioners rely on open communication and a long-standing physician-patient relationship when diagnosing and managing depression in a palliative care patient. They view the patient's context of great importance. This approach fits with the patient-centered care that is promoted in primary care.

Finally, in **Chapter 8** we discuss our findings in a more general way. First we provide a summary of our main findings and highlight some of the strengths and limitations of our exploration. Furthermore, we discuss the findings in relation to the initial research objectives concerning the prevalence and incidence of depression in palliative care, the use of screening instruments for depression in palliative care and the patient and physicians perspectives on depression in palliative care. Also in this chapter some recommendations are made for the clinical practice and for future research in depression in palliative care.

In the **epilogue**, finally, I give my personal view about the value of living and caring in the light of death and the importance of connection.

Samenvatting

Dit proefschrift gaat over depressie bij palliatieve patiënten. In de **proloog** schets ik de oorsprong van mijn persoonlijke interesse in dit onderwerp.

Hoofdstuk 1 geeft een algemene introductie over depressie in de palliatieve zorg en beschrijft de vraagstellingen en de opzet van dit proefschrift. Allereerst wordt de context van de palliatieve zorg geschetst en daarnaast wordt de complexiteit van depressie in de context van de palliatieve zorg geïllustreerd en de relevantie van een goed begrip van dit onderwerp om goede zorg te kunnen bieden voor patiënten met depressie in de palliatieve fase. Verder worden in hoofdstuk 1 de problemen die er rond dit onderwerp bestaan beschreven: het toepassen van de definitie van depressie in de context van de palliatieve patiënt, het onderscheiden van depressie van normaal verdriet en het gebruik van screeningsinstrumenten voor depressie in de context van de palliatieve zorg. Tot slot worden de onderzoeksvragen van dit proefschrift geformuleerd en wordt de opbouw van het proefschrift beschreven.

In **hoofdstuk 2** worden de bevindingen van een historisch cohortonderzoek gepresenteerd. Hiervoor is een periode van 20 jaar van de Continue Morbiditeits Registratie (CMR database) in vier huisartspraktijken gebruikt waarbij gekeken is naar de incidentie van depressieve stoornis in de laatste fase van het leven van patiënten in de eerstelijns zorg die overleden zijn aan hartvaatziekten, kanker of COPD. De data van dit onderzoek is gebaseerd op de reële patiëntenzorg in de huisartspraktijk waarbij diagnoses werden gesteld door huisartsen in de context van zorg, verleend vanuit de actuele behoeften en hulpvraag van patiënten. In totaal zijn 982 patiënten in deze studie geïncludeerd waarvan er 19 (1,9%) in het laatste jaar van het leven gediagnosticeerd werden met een depressieve stoornis. De conclusie van dit onderzoek is dat de incidentie van depressieve stoornis in de laatste fase van het leven opvallend lager is dan verwacht.

In **hoofdstuk 3** hebben we de prevalentie van depressieve stoornis in een steekproef van 64 poliklinische patiënten met een vergevorderd stadium van kanker bepaald door een diagnostisch psychiatrisch interview (SCAN 2.1) af te nemen. De prevalentie van depressieve stoornis in de steekproef was drie procent. De conclusie van dit onderzoek is dat de prevalentie van depressieve stoornis in patiënten met een vergevorderd stadium van kanker laag is.

Hoofdstuk 4 beschrijft de validiteit van de Beck Depression Inventory (BDI-II) en een enkelvoudige screeningsvraag als screeningsinstrumenten voor depressieve stoornis in patiënten met een vergevorderd stadium van kanker. Patiënten met een gemetastaseerde oncologische aandoening werd gevraagd om een vragenlijst in te vullen waaronder de Beck Depression Inventory (BDI-II) en een enkelvoudige screeningsvraag 'Voelt u zich depressief?'. De sectie depressie van de PRIME-MD werd gebruikt als gouden standaard. Van 46 patiënten werd volledige data verzameld. De oppervlakte onder de curve (AUC) van de receiver operating characteristics (ROC) analyse van de BDI-II was 0,82. Het optimale afkappunt van de BDI-II was 16 resulterend in een sensitiviteit van 90% en een specificiteit van 69%. De enkelvoudige screeningsvraag resulteerde in een sensitiviteit van 50% en een specificiteit van 94%. We concludeerden dat de BDI-II een adequaat screeningsinstrument voor depressieve stoornis kan zijn bij patiënten met een vergevorderd stadium van kanker en dat de sensitiviteit van de enkelvoudige screeningsvraag slecht is.

In **hoofdstuk 5** hebben we het verband tussen fysieke symptoomlast en psychologische symptoomlast onderzocht. Hiervoor hebben we in een steekproef van 65 palliatieve patiënten de relatie tussen scores op screeningsinstrumenten voor depressie (Beck Depression Inventory (BDI-II), Beck Depression Inventory Primary Care (BDI-PC), Hospital Anxiety and Depression Scale (HADS)) en verschillende fysieke symptoomclusters onderzocht. De fysieke symptomen werden beoordeeld met de Memorial Symptom Assessment Scale Short Form (MSAS-SF). In deze studie vonden we dat screeningsinstrumenten voor depressie hoog correleren met

verschillende fysieke symptoomclusters. De BDI-II cognitieve subschaal was de enige schaal die niet significant gecorreleerd was met de fysieke symptoomclusters. We concludeerden uit deze studie dat screeningsinstrumenten voor het opsporen van depressie bij patiënten met een vergevorderd stadium van kanker mogelijk geen accurate weergave van het voorkomen van depressie geeft omdat de screeningsinstrumenten ook fysieke symptoomlast meten, vooral als patiënten symptomen hebben uit de clusters vermoeidheid/anorexia/cachexie, neuropsychologische symptomen, fysieke beperkingen of pijn. De BDI-II cognitieve subschaal differentieert het beste van de fysieke symptoomlast.

In **hoofdstuk 6** beschrijven we een exploratie van opvattingen van palliatieve patiënten over krachtbronnen en manieren van voorkomen en omgaan met klachten van somberheid. Hiervoor hebben we een kwalitatieve studie uitgevoerd met semigestructureerde interviews bij vijftien ambulante patiënten met een vergevorderd stadium van kanker. De interviews werden uitgeschreven en door twee onderzoekers onafhankelijk geanalyseerd volgens het principe van de continue vergelijkende analyse. Patiënten in dit onderzoek rapporteerden over attitudes en specifieke coping strategieën die zij behulpzaam vonden. Daarnaast gaven zij krachtbronnen aan vanuit hun levensverhaal en de beleving van spiritualiteit. Krachtbronnen werden ook gevonden in betekenisvolle contacten met familie en vrienden en in persoonlijke aandacht van professionele zorgverleners. Op basis van de bevindingen in deze studie concludeerden we dat palliatieve patiënten krachtbronnen kunnen benoemen om klachten van somberheid te voorkomen en het hoofd te bieden. We geven de suggestie dat zorgverleners palliatieve patiënten kunnen helpen om hun persoonlijke krachtbronnen te identificeren die toegankelijk en beschikbaar zijn in hun specifieke context, waardoor de autonomie van patiënten toe kan nemen.

Hoofdstuk 7 beschrijft opvattingen van huisartsen ten aanzien van het herkennen, diagnosticeren, behandelen en/of begeleiden van depressie bij palliatieve patiënten. We hebben hiertoe vier focusgroep discussies

uitgevoerd met tweeëntwintig huisartsen uit verschillende huisartspraktijken en met verschillende expertiseniveaus in palliatieve zorg. Na het uitschrijven van de discussies werden de transcripten door twee onderzoekers onafhankelijk geanalyseerd met gebruik van continue vergelijkende analyse. De bevindingen waren dat huisartsen het herkennen, diagnosticeren en begeleiden of behandelen van depressie bij palliatieve patiënten als een continu proces ervaren. Het maken van het onderscheid tussen normaal en pathologische verdriet werd als moeilijk ervaren. De huisartsen gebruikten geen strikte toepassing van de criteria voor depressieve stoornis, maar vertrouwen sterk op hun klinisch oordeel waarbij ze de context van de patiënt en achtergrondfactoren sterk lieten meewegen. Ze gaven verder aan dat de begeleiding en behandeling van depressie bij palliatieve patiënten voornamelijk ondersteunend en niet specifiek is. Antidepressiva werden zelden voorgeschreven. De huisartsen beschreven verder moeilijkheden in het diagnosticeren en behandelen van depressie bij palliatieve patiënten en in hoofdstuk 7 beschrijven wij hun suggesties om de zorg voor depressie bij palliatieve patiënten in de eerstelijn te verbeteren. De context van de patiënt speelt voor de huisartsen een cruciale rol in het omgaan met depressie bij palliatieve patiënten. Dit past in het zorgmodel dat vaak in de huisartspraktijk toegepast wordt en waarin de patiënt centraal staat.

Tot slot wordt in **hoofdstuk 8** een overzicht gegeven van de belangrijkste bevindingen uit de voorgaande hoofdstukken en worden sterke en zwakke punten van dit onderzoek beschouwd. Daarna bespreken we de belangrijkste onderzoeksbevindingen in relatie tot de onderzoeksvragen van dit proefschrift over de prevalentie en incidentie van depressie in de palliatieve fase, het gebruik van screeningsinstrumenten voor depressie in de palliatieve zorg en verschillende perspectieven op depressie in de palliatieve zorg. Hoofdstuk 8 sluit af met aanbevelingen voor de klinische praktijk en onderzoek.

In de **epiloog** geef ik tenslotte mijn persoonlijke visie over de waarde van leven en zorgen in het licht van het sterven en het belang van verbinding hierin.

Dankwoord

"When one tugs at a single thing in nature,

he finds it attached to the rest of the world."

John Muir (1838 - 1914)

Een grote klus kun je niet alleen klaren….. Er zijn veel mensen met wie ik mij verbonden voel en ik ben velen dankbaar voor de steun die ik heb mogen ontvangen in het schrijven van dit proefschrift.

Allereerst zijn er de patiënten met wie dit verhaal begonnen is. De verwondering en het respect dat ik voor hen voel, heeft aan de wieg gestaan van het werk van de afgelopen jaren. In veel huizen ben ik gastvrij ontvangen en de openhartigheid waarmee mensen hun verhaal deelden, heeft mij diep geraakt. Niet zelden stapte ik geroerd en met tranen in mijn ogen de auto weer in.

Zonder de onafgebroken en kundige begeleiding van promotoren Kris Vissers, Chris van Weel en Judith Prins en van copromotor Peter Lucassen zou het niet gelukt zijn om alle informatie en ervaringen die ik verzameld heb in het licht van de wetenschap te zetten. De weg is niet zonder hobbels geweest. Het stoeien met nieuwe concepten en ideeën kan schijnbare zekerheden onderuit halen en vraagt daarom een zekere moed en openheid. Ik dank jullie allen dat jullie daartoe bereid waren en dat jullie mij hierin uitgedaagd en ondersteund hebben. Peter, speciaal dank voor de momenten waarop je voorstelde 'even een rondje te gaan lopen'. De frisse lucht deed mij goed……

Eric, ook jou ben ik veel dank verschuldigd. De eerste jaren van het onderzoek ben je mijn directe sparring partner geweest. Onze gedeelde visie op patiëntenzorg heeft de richting van mijn onderzoek wezenlijk bepaald en ik ben je dankbaar dat je me gestimuleerd hebt om de impulsen vanuit die visie te volgen.

Bregje en Marieke, de tijd dat wij samen op de Buitenhoek werkten, is wat mij betreft te kort geweest. Ik dank jullie voor jullie vriendschap, jullie openheid en het verdragen van hondenluchtjes en natte neuzen…... Ook de andere collega's op de Buitenhoek en op de Omloop, en in het bijzonder Yvonne, Kathrin en Jeroen, wil ik hartelijk bedanken voor de collegialiteit, het meedenken, het meevieren en het meeleven.

Het palliatieve team heeft de eerste jaren hard meegewerkt aan het rekruteren van patiënten en hiervoor wil ik met name Jose, Henny, Jeroen en Stans bedanken.

Mijn Leuvense collega's Mieke, Wouter, Jan en Bert, dank ik voor de zeer aangename en moeiteloze samenwerking en de mogelijkheid om samen te kunnen dromen over nieuw onderzoek op het gebied van spiritualiteit in de palliatieve fase. Ik hoop dat we dit jaar en de daarop volgende jaren veel van deze dromen mogen verwezenlijken.

Mijn paranifmen, Carolien en Bregje, dank voor jullie steun. Ik voel jullie achter en naast me staan. Alle aanmoediging en de nodige relativering kon en kan ik goed gebruiken!

Rob Vincken wil ik bedanken voor het eindeloos openen voor nieuwe perspectieven in mijn werk en in mijn leven. Ondanks alle botsingen ervaar ik een groot vertrouwen in onze verbinding en de grenzeloosheid in jouw creativiteit stel ik erg op prijs. Hugo Alberts wil ik bedanken als een dierbare onafhankelijke sparring partner. In Coffeelovers worden mooie ideeën geboren…..ik kijk uit naar de toekomst. Carlein Karimoen, dankjewel voor onze gesprekken over het leven. Het helpt mij om zowel het leven als het sterven beter te begrijpen. Jean, Johanna en Sjengske, dank voor jullie

vriendschap en aanwezigheid. Ik hoop nog veel met jullie te mogen zijn, bewegen en beleven. Hakim, dank voor al die kopjes thee. Ik hoop er nog veel te mogen drinken!

Ik wil op deze plaats ook een diepe buiging maken naar mijn leraren zonder wie ik niet zou zijn wie ik nu ben: Jos Vanroy, Philippe Voarino, Patrick Cassidy, Miles Kessler, Ad van Dun en anderen die ik niet allemaal bij naam kan noemen. Jullie leerden en leren mij mezelf en de wereld kennen. Hetzelfde geldt voor allen die ik regelmatig op de aikidomat tref en met wie ik het voorrecht heb om te oefenen en te exploreren. Ik voel me thuis bij jullie.

Ik wil Marry en Lex bedanken voor de gastvrijheid om hun huis voor mij open te stellen in de eerste jaren van mijn werk in Nijmegen. Het 'thuis' komen terwijl het eten net op tafel gezet werd, was voor mij een ongekend genoegen! Mijn moeder, Jonet, dank ik voor de moed die zij heeft om ondanks alles haar eigen weg te gaan. Ik dank Inge voor de niet aflatende bereidheid om te kijken naar de intermenselijke relaties in de wetenschappelijke wereld en Jordi en Anna voor de stevige connectie met de noordelijke gebieden. In jullie jongens, Theo en Max, zie ik iedere keer weer het bruisende leven….

En tot slot: een warm woord van dank voor Karel, mijn vader, die mij ooit aanmoedigde om die professor (Kris Vissers) maar eens op te bellen om een afspraak te maken. 'Dat zal hij waarschijnlijk best leuk vinden.' Volgens mij heb je gelijk gekregen…… Ik heb veel van je geleerd en had graag nog langer van je willen leren.

List of Publications

Scientific Publications:

1. Sieben, J.M., Vlaeyen, J.W.S., Portegijs, P.J.M., Warmenhoven, F.C., S int, A.G., Dautzenberg, N., Romeijnders, A., Arntz, A., Knottnerus, J.A. ***General practitioners' treatment orientations towards low back pain: influence on treatment behaviour and patient outcome.*** Eur J Pain. 2009 Apr;13(4):412-8.

2. Warmenhoven, F.C., van Rijswijk, H.C.A.M., Kan, C., Speckens, A., Vissers, K.C.P., van Weel, C.W. ***How to screen for depression in palliative care patients.*** Poster presentation NCEBP Science Day Nijmegen 2008 and EAPC Research Forum Trondheim 2008.

3. Warmenhoven F, van Rijswijk E, Engels Y, Kan C, Prins J, van Weel C, Vissers K. ***The Beck Depression Inventory (BDI-II) and a single screening question as screening tools for depressive disorder in Dutch advanced cancer patients.*** Support Care Cancer. 2012 Feb;20(2):319-24.

4. Vermandere M, De Lepeleire J, Smeets L, Hannes K, Van Mechelen W, Warmenhoven F, van Rijswijk E, Aertgeerts B. ***Spirituality in general practice: a qualitative evidence synthesis.*** Br J Gen Pract. 2011 Nov;61(592):e749-60. Review.

5. Warmenhoven F, van Rijswijk E, van Weel C, Prins J, Vissers K. ***Low prevalence of depressive disorder in ambulatory advanced cancer patients using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN 2.1).*** J Affect Disord. 2012 Feb; 136 (3):1209-11.

6. Van Mechelen W, Aertgeerts B, De Ceulaer K, Thoonsen B, Vermandere M, Warmenhoven F, van Rijswijk E, Delepeleire J***. Defining the palliative care patiënt: A systematic review.*** Palliat Med. 2012 Feb 6. Epub ahead of print

7. Warmenhoven F, van Rijswijk E, van Hoogstraten E, van Spaendonck K, Lucassen P, Prins J, Vissers K, van Weel C. ***How family physicians address diagnosis and management of depression in palliative care patients.*** Ann Fam Med. 2012 Jul-Aug;10(4):330-6.

8. Vermandere M, Lepeleire JD, Van Mechelen W, Warmenhoven F, Thoonsen B, Aertgeerts B. ***Outcome Measures of Spiritual Care in Palliative Home Care: A Qualitative Study***. Am J Hosp Palliat Care. 2012 Jul 24. Epub ahead of print

9. Vermandere M, Lepeleire JD, Van Mechelen W, Warmenhoven F, Thoonsen B, Aertgeerts B. ***Spirituality in palliative home care: a framework for the clinician.*** Support Care Cancer. 2012 Oct 13. Epub ahead of print

10. Warmenhoven F, van Weel C, Vissers K, Prins J. ***Screening Instruments for Depression in Advanced Cancer Patients: What Do We Actually Measure?*** Pain Pract. 2012 Nov 16. Epub ahead of print

Book (chapters):

- J.B. Prins, M. Bannink, F. Warmenhoven. Casus 13 Een depressieve patiënt. In: Palliatieve zorg in de dagelijkse praktijk. 2010. Bohn Stafleu van Loghum.
- F.C. Warmenhoven, E. van Rijswijk. Hoofdstuk 28 Depressie. In: Probleem-georiënteerd denken in de palliatieve zorg. Een praktijkboek voor de opleiding en de kliniek. 2012. De Tijdstroom.

Other:

- Sanne Claas en Franca Warmenhoven. Mindfulness in de Verloskunde. Tijdschrift voor Verloskunde. April 2012.
- Franca Warmenhoven en Linda Schipper. Mindfulness voor Ouderen. Geron. Tijdschrift over ouder worden en maatschappij. December 2012.

Curriculum Vitae

"In pursuit of knowledge, every day something is acquired:

In pursuit of wisdom every day something is dropped"

Lao Tse

Franca Warmenhoven was born on December 9th 1977 in Ukkel (Belgium). At a young age, she moved to Waddinxveen (The Netherlands), together with her older brother and parents, where she grew up and lived until she finished her high school (Coornhert Gymnasium in Gouda) in 1995. She moved to Maastricht to study Health Sciences for a year after which she was allowed to enter medical school in 1996. In 2002 she graduated cum laude as a medical doctor and started working in a nursing home and as a teacher in medical education. From 2004 until 2007 she did a general practice residency training at the Maastricht University, during which time two main interests were born and developed: Firstly, she developed an interest in palliative care while working in three general practices in the Netherlands and during an internship in the Princess Alice Hospice in Esher (United Kingdom). Secondly, she developed an interest for the practice of mindfulness and acceptance-based strategies in health care and other domains of society. The first interest resulted in committing herself to a research project on depression in palliative care at the Radboud University Nijmegen Medical Centre where she worked from 2007 until 2011. From January 2013 she works at the KU Leuven in Belgium where she supports a project on spirituality in palliative care. Her interest in mindfulness and acceptance-based strategies resulted in co-creating an organization, SeeTrue (www.mindfulness-trainingen.nl), with the mission to spread and develop mindfulness and acceptance-based strategies in the Netherlands.

Franca has taught mindfulness to different groups among which cancer patients, school children, and companies and has contributed to the development of adapted training curricula, for example mindfulness for pregnant women, mindfulness for parents, mindfulness and eating. She is also involved as a trainer in the teachers training for mindfulness teachers. From 2010 she is the chair of a professional organization for mindfulness, the Vereniging voor Mindfulness. Franca lives in the hills of the south of the Netherlands where she enjoys walking with her dog.

"A biography often focuses on what a person has done and acquired. I hope I have provided the reader with adequate information on this part. However, I also like to think of my life in terms of what I have dropped, as Lao Tse so poignantly states. Like any other person, I have had to let go of many things in my life: people, things, ideas of myself, of others and the world. It seems only logical that, especially in palliative care, we both value what we acquire and what we were able to let go. And in the process we hope to discover what life is about."

Franca

Appendix 1

Beck Depression Inventory (BDI-II)

BDI-II VRAGENLIJST

Aaron T. Beck, Dutch translation A.J. Willem van der Does.

Deze vragenlijst bestaat uit een aantal uitspraken die in groepen bij elkaar staan (1 t/m 21).
Leest u iedere groep aandachtig door. Kies dan in elke groep de uitspraak die het best weer-geeft hoe u zich de **AFGELOPEN 2 WEKEN, MET VANDAAG ERBIJ**, gevoeld heeft.
Omcirkel het cijfer dat vóór de door u gekozen uitspraak staat. Als in een groep meerdere uit-spraken even goed op u van toepassing zijn, omcirkel dan het cijfer van elk van deze uitspraken.

LET ER OP DAT U ALLE UITSPRAKEN VAN EEN BEPAALDE GROEP LEEST, VOORDAT U UW KEUZE MAAKT.

SOMBERHEID, VERDRIET

1.	0.	Ik voel me niet somber.
	1.	Ik voel me een groot deel van de tijd somber.
	2.	Ik ben de hele tijd somber.
	3.	Ik ben zó somber of ongelukkig, dat ik het niet meer verdragen kan.

PESSIMISME

2.	0.	Ik ben niet ontmoedigd over mijn toekomst.
	1.	Ik ben meer ontmoedigd over mijn toekomst dan vroeger.
	2.	Ik verwacht niet dat de dingen goed voor mij zullen uitpakken.
	3.	Ik heb het gevoel dat de toekomst hopeloos is en dat het alleen maar erger zal worden.

MISLUKKINGEN

3.	0.	Ik voel me geen mislukkeling.
	1.	Ik heb te veel dingen laten mislukken.
	2.	Als ik terugkijk, zie ik een hoop mislukkingen.
	3.	Ik vind dat ik als persoon een totale mislukking ben.

VERLIES AAN PLEZIER

4.	0.	Ik beleef net zoveel plezier als altijd aan de dingen die ik leuk vind.
	1.	Ik geniet niet meer zoveel van dingen als vroeger.
	2.	Ik beleef heel weinig plezier aan de dingen die ik vroeger leuk vond.
	3.	Ik beleef geen enkel plezier aan de dingen die ik vroeger leuk vond.

SCHULDGEVOELENS

5.	0.	Ik voel me niet bijzonder schuldig.
	1.	Ik voel me schuldig over veel dingen die ik heb gedaan of had moeten doen.
	2.	Ik voel me meestal erg schuldig.
	3.	Ik voel me de hele tijd schuldig.

GEVOEL GESTRAFT TE WORDEN

6.	0.	Ik heb niet het gevoel gestraft te worden.
	1.	Ik heb het gevoel dat ik misschien gestraft zal worden.
	2.	Ik verwacht gestraft te worden.
	3.	Ik heb het gevoel dat ik nu gestraft word.

AFKEER VAN ZICHZELF

7.	0.	Ik voel me over mezelf net als altijd.
	1.	Ik heb minder zelfvertrouwen.
	2.	Ik ben teleurgesteld in mezelf.
	3.	Ik heb een hekel aan mezelf.

ZELFKRITIEK

8.	0.	Ik bekritiseer of verwijt mijzelf niet meer dan gewoonlijk.
	1.	Ik ben meer kritisch op mezelf dan vroeger.
	2.	Ik bekritiseer mezelf voor al mijn tekortkomingen.
	3.	Ik verwijt mezelf al het slechte wat gebeurt.

SUÏCIDALE GEDACHTEN OF WENSEN

9.	0.	Ik heb geen enkele gedachte aan zelfdoding.
	1.	Ik heb gedachten aan zelfdoding, maar ik zou ze niet ten uitvoer brengen.
	2.	Ik zou liever een eind aan mijn leven maken.
	3.	Ik zou een eind aan mijn leven maken als ik de kans kreeg.

HUILEN

10.	0.	Ik huil niet meer dan vroeger.
	1.	Ik huil meer dan vroeger.
	2.	Ik huil om elk klein ding.
	3.	Ik wil graag huilen, maar ik kan het niet.

AGITATIE, ONRUST

11.	0.	Ik ben niet rustelozer of meer gespannen dan anders.
	1.	Ik ben rustelozer of meer gespannen dan anders.
	2.	Ik ben zo rusteloos of opgewonden dat ik moeilijk stil kan zitten.
	3.	Ik ben zo rusteloos of opgewonden dat ik moet blijven bewegen of iets doen.

VERLIES VAN INTERESSE

12.	0.	Mijn belangstelling voor andere mensen of activiteiten is niet verminderd.
	1.	Ik heb nu minder belangstelling voor andere mensen of dingen dan vroeger.
	2.	Ik heb mijn belangstelling voor andere mensen of dingen grotendeels verloren.
	3.	Het is moeilijk nog ergens belangstelling voor op te brengen.

BESLUITELOOSHEID

13.	0.	Ik neem beslissingen ongeveer even makkelijk als altijd.
	1.	Ik vind het moeilijker om beslissingen te nemen dan gewoonlijk.
	2.	Ik heb veel meer moeite met het nemen van beslissingen dan vroeger.
	3.	Ik heb moeite met alle beslissingen.

WAARDELOOSHEID

14.	0.	Ik heb niet het gevoel dat ik waardeloos ben.
	1.	Ik zie mezelf niet meer zo waardevol en nuttig als vroeger.
	2.	Vergeleken met anderen voel ik me meer waardeloos.
	3.	Ik voel me volstrekt waardeloos.

ENERGIEVERLIES

15.	0.	Ik heb nog evenveel energie als altijd.
	1.	Ik heb minder energie dan vroeger.
	2.	Ik heb niet voldoende energie om veel te doen.
	3.	Ik heb niet genoeg energie om wat dan ook te doen.

VERANDERING IN SLAAPPATROON

16.	0.	Mijn slaappatroon is niet veranderd.
	1a	Ik slaap wat meer dan gewoonlijk.
	1b	Ik slaap wat minder dan gewoonlijk.
	2a	Ik slaap veel meer dan gewoonlijk.
	2b	Ik slaap veel minder dan gewoonlijk.
	3a	Ik slaap het grootste deel van de dag.
	3b	Ik word 1-2 uur te vroeg wakker en kan niet meer inslapen.

PRIKKELBAARHEID

17.	0.	Ik ben niet meer geprikkeld dan anders.
	1.	Ik heb meer prikkelbaar dan anders.
	2.	Ik ben veel meer prikkelbaar dan anders.
	3.	Ik ben de hele tijd prikkelbaar.

VERANDERING VAN EETLUST

18.	0.	Mijn eetlust is niet veranderd.
	1a	Mijn eetlust is wat kleiner dan gewoonlijk.
	1b	Mijn eetlust is wat groter dan gewoonlijk.
	2a	Mijn eetlust is veel kleiner dan gewoonlijk.
	2b	Mijn eetlust is veel groter dan gewoonlijk.
	3a	Ik heb helemaal geen eetlust.
	3b	Ik verlang de hele tijd naar eten.

CONCENTRATIEPROBLEMEN

19.	0.	Ik kan me net zo goed concentreren als altijd.
	1.	Ik kan me niet zo goed concentreren als anders.
	2.	Het is lastig om mijn gedachten ergens lang bij te houden.
	3.	Ik kan me nergens op concentreren.

MOEHEID

20.	0.	Ik ben niet meer moe of afgemat dan gewoonlijk.
	1.	Ik word sneller moe of afgemat dan gewoonlijk.
	2.	Ik ben te moe of afgemat voor veel dingen die ik vroeger wel deed.
	3.	Ik ben te moe of afgemat voor de meeste dingen die ik vroeger wel deed.

VERLIES VAN INTERESSE IN SEX

21.	0.	Ik heb de laatste tijd geen verandering gemerkt in mijn belangstelling voor sex.
	1.	Ik heb minder belangstelling voor sex.
	2.	Ik heb tegenwoordig veel minder belangstelling voor sex.
	3.	Ik heb alle belangstelling voor sex verloren.

Appendix 2

Hospital Anxiety and Depression Scale

Het is bekend dat emoties bij de meeste ziektes een belangrijke rol spelen. Wanneer uw dokter weet hoe u zich voelt, zal deze beter in staat zijn u te helpen.
Deze vragenlijst dient als hulpmiddel om te weten te komen hoe u zich voelt. Lees iedere vraag goed door en geef uw antwoord aan met een kruisje in het hokje dat het beste weergeeft hoe u zich gedurende <u>de afgelopen week</u> gevoeld heeft.
Denk niet te lang na over uw antwoord. Het gaat bij al deze uitspraken om uw eigen indruk. Er bestaan geen foute antwoorden, elk antwoord is goed, zolang het maar uw eigen indruk weergeeft.

Ik voel me gespannen: Γ Meestal Γ Vaak Γ Af en toe, soms Γ Helemaal niet **Ik geniet nog steeds van de dingen waar ik vroeger van genoot:** Γ Zeker zo veel Γ Wel wat minder Γ Duidelijk minder Γ Eigenlijk nauwelijks nog **Ik heb een soort angstgevoel alsof er iets vreselijks zal gebeuren:** Γ Jazeker, en vrij erg Γ Ja, maar niet zo erg Γ Een beetje, maar het hindert me niet Γ Helemaal niet	**Ik heb het gevoel dat alles moeizamer gaat:** Γ Bijna altijd Γ Heel vaak Γ Soms Γ Helemaal niet **Ik heb een soort angstig, gespannen gevoel in mijn buik:** Γ Helemaal niet Γ Soms Γ Vrij vaak Γ Heel vaak **Het interesseert me niet meer hoe ik er uit zie:** Γ Inderdaad, helemaal niet meer Γ Niet meer zoveel als eigenlijk zou moeten Γ Het interesseert me wel, maar minder dan vroeger Γ Het interesseert me nog net zoveel als vroeger

Ik kan best lachen en de dingen van de vrolijke kant zien: Γ Net zoveel als vroeger Γ Nu wel wat minder Γ Duidelijk minder Γ Helemaal niet **Ik maak me ongerust:** Γ Heel erg vaak Γ Vaak Γ Af en toe, maar niet zo vaak Γ Heel soms **Ik voel me opgewekt:** Γ Helemaal niet Γ Heel af en toe Γ Soms Γ Meestal **Ik kan best rustig zitten en me ontspannen:** Γ Jazeker Γ Meestal Γ Af en toe Γ Helemaal niet	**Ik ben onrustig en voel dat ik iets te doen moet hebben:** Γ Inderdaad, heel duidelijk Γ Duidelijk Γ Enigszins Γ Helemaal niet **Ik verheug me van tevoren op dingen die komen gaan:** Γ Net zoveel als vroeger Γ Een beetje minder dan vroeger Γ Veel minder dan vroeger Γ Bijna nooit **Ik raak plotseling in paniek:** Γ Inderdaad, zeer vaak Γ Tamelijk vaak Γ Soms Γ Helemaal nooit **Ik kan van een goed boek genieten, of van een radio- of televisieprogramma:** Γ Vaak Γ Tamelijk vaak Γ Af en toe Γ Heel zelden